

Lesson 1: Animal Health

Nutrition Lab Directions

Introduction

A healthy, well-cared-for cow will give more milk. The way farmers care for their cows and how they feed them has helped to increase the amount of milk cows give over the past 50 years.

In this lab, students will simulate how farmers use a large feeding scale and mixer to balance and weigh each feed to meet the cow's precise nutrient needs. Students will use measuring cups and nutritional labels to make a snack of a spinach salad and orange juice that meets the required nutrients listed in this lab.

Materials Needed

- Food (baby carrots, orange juice, spinach, and string cheese), measuring cups, bowls and cups, calculators, and pencils
- Nutrition Lab Sheet and Nutrition Label for Lab Resource

Procedure:

1. Assign students to lab groups or partners.
2. Have students get food items, measuring cups, bowls and cups, and calculator for themselves.
3. Pass out the Nutrition Lab Sheet and the Nutrition Label for Lab Resource.
4. Allow students class time to complete the lab using their Nutrition Lab Sheet as a guide and complete the questions in order.
5. Walk around, answering questions and offering help as needed.
6. Do closure activity.
7. Collect the Nutrition Lab Sheet.

Closure

Today you simulated how farmers balance and weigh each feed to meet the cow's precise nutrient needs by making a snack of a spinach salad and orange juice that contained the needed amounts of nutrients. How do you think adding 6 more foods to your salad would change your experiment?

Summative Assessment

Students will complete the Nutrition Lab Sheet with a mastery level of 80% or higher.