

CASE

*Curriculum for Agricultural
Science Education*

Principles of Agricultural Science – Animal

Nutritional Disorders

Unit 5 – Lesson 5.4 Nutritional Disorders

Nutritional Disorders

- Caused by an unwholesome or unnatural physical condition brought on by overfeeding or underfeeding.
- Most common : HUNGER
 - A lack of sufficient feed

Deficiency

- A lack of one or more specific nutrients.
- Caused by:
 - Too little feed
 - Feeds that are low in one or more nutrients.

Toxicity

- State or degree of being poisonous.
 - Poisonous or spoiled feeds
 - Excess micronutrients



Energy

- Deficiency symptoms
 - Weight loss
 - Decrease in health, growth, and production
- Excess problems
 - Fat deposition



Protein

- Deficiency symptoms
 - Decreased growth
 - Depressed appetite
 - Poor overall health
- Excess problems
 - May not be harmful
 - Excess protein converted to energy
 - Not cost effective

Micronutrients

- Vitamins and Minerals
 - Often overlooked portion of diet
 - Content in feeds is dependent on
 - season
 - soils
 - geography

Economics and Health

Nutritional disorders negatively impact the growth and production of livestock.

- Less expensive to prevent than to treat.



References



- Cheeke, P.R. (1991). *Applied animal nutrition: Feeds and feeding*. Englewood Cliffs, NJ: Prentice Hall.
- Ensminger, M.E. (1991). *Animal science* (9th ed.). Danville, IL: Interstate Publishers, Inc.