

MJF COLLEGE OF VETERINARY & ANIMAL SCIENC CHOMU, JAIPUR (RAJ.)

DEPARTMENT OF ANIMAL NUTRITION

FEED EXPERIMENT DATE- 30/3/24 - 18/4/24

Delivered by-Dr. Vijay Prakash Saini Dr. Abhishek Mehta Chepter 1

Introduction To Feeding Of Livestock-

Importance Of Sciecntific Feeding -

Feeding Experiment

Scientific feeding – A knowledge of the quantitative needs of the body for these nutrients and of the relative value of feeds as source of them is the basis of scientific feeding.

Feeding experiment –

- 1. Complete feeding trials
- 2. Feeding trials with laboratory animals
- 3. The purified diet method
- 4. Germfree technique
- 5. Group feeding v/s individual feeding
- 6. Controlled v/s Ad Libitum feeding
- 7. Equalized paired feeding or paired feeding
- 8. Slaughter experiment
- 9. Experimental designs
 - A. Factorial experiment
 - B. Latin square design (LSD)
 - C. Cross- over design

Imp. purified diet method:

Purified diets were used in conducting feeding trial with lab animals. Purified diets consist of purified sources of the various nutrients. For example, protein diets consists of sources of the various nutrients. For example, protein is supplied as casein, purified soyabean protein.

Such a diet makes it possible to include or withdraw a given nutrient with a minimum of disturbance of any of the other nutrient relations.

Purified diet method become responsible for much of our modern knowledge of nutrition, including the physiology of vitamins, the establishment of differences in protein quality and more extract information regarding many of the minerals.

Studies of the role of an element needed by the body in small amount can be effectively carried out only with the basal diets which may be free from it and to which it may be added in known amounts.

Limitation –

- The ingredients of these diets cannot be considered pure in the absolute sense. Strach cannot be entirely freed from mineral elements.
- Some of the constituents, notably protein, on purified diets may be altered from their natural state in the process of purification.
- 3. The kind of pure carbohydrate used affects the significance of the results in the case of certain vitamins because of the effects of

various carbohydrate on vitamin synthesis in the alimentary tract.

- 4. All the nutrient requirements of the species should be known to prepare a completely successful purified diet.
- 5. The diet must be of suitable physical nature and sufficiently palatable so that it will be consumed as per the need.