

## **Feeding standards for Monogastrics (Poultry, Swine, Equine and Laboratory animals)**

Feeding standards are the tables, which indicate the quantities of nutrients to be fed to the various classes of livestock for different physiological functions like growth, maintenance, lactation and egg production. The nutrient requirements are generally expressed in quantities of nutrients required per day or as a percentage of diet.

There are two terms, which has been used, in the feeding standards. One is the nutrient allowance and another is the nutrient requirement.

- The nutrient allowance gives an extra allowance of nutrient over the requirement, which gives a margin of safety.
- Nutrient requirement gives the requirement for optimum production.

The common feeding standards used for monogastrics are NRC feeding standards in USA and many other countries and in India we follow Bureau of Indian standards. In UK the ARC feeding standard is also used.

### ***National Research Council (N.R.C.) standard***

- National Research Council, USA, recommends a nutrient allowance for different species of animals.
- The N.R.C. reports for each species are the pooled judgement of a group of experts in the field of species in question.
- Today a number of countries follow N.R.C. standards.
- The NRC standards express energy requirement as metabolisable energy for poultry, digestible energy for swine and horses.
- The NRC revises these feeding standards in keeping with new information and changing feeding practices.

### ***Agricultural and Food Research Council (A.F.R.C.) standard***

- The nutritive requirement of various livestock in the United Kingdom has been presented in Ministry of Agriculture's Bulletins.
- The Technical Committee of the Agricultural and Food Research Council of Britain prepares these.
- Requirements are set forth in three separate reports dealing with poultry and pigs, each of these reports extensive summaries of the literature upon which the requirements are based.

### ***Indian standards***

- India has been almost entirely dependent on standards drawn up by late F. B. Morrison.
- Dr. K. C. Sen had compiled the feeding standards on Morrison's recommendations where he adopted the average of maximum and minimum values recommended by Morrison.
- Considering the fact that nutrient needs of livestock and poultry breeds under tropical environments are different from those developed in temperate climate, the Indian Council of Agricultural Research realised the necessity of setting up suitable feeding standards for the Indian livestock and poultry.
- A scientific panel on Animal Nutrition and Physiology was set up. The scientific panel set up subcommittees for each species by inviting experts from various institutes of the country.
- On the basis of the scientific information arising from the experimental work carried out in India over the past two decades, nutrient requirement of Indian livestock and poultry.

### ***Bureau of Indian standards***

- These standards have been specified for Swine, Poultry and certain laboratory animals.

- Energy is expressed as ME kcal/kg.
- Protein expressed as crude protein.
- The standard is revised periodically from time to time.