# Composition the diets of animals

## A - Desirable characteristics of a ration:

## 1. Adequate & Balanced

Adequate diet that is blocking the clipboard and productivity nutritional needs of the animal energy, protein, fat, minerals and vitamins within 24 hours without shortages or increased.

In terms of balance, a sufficient amount of energy the protein is used to extend the body with energy rather than be used for conservation, growth and milk production. Must have a diet a minimum of fat in order to ensure coverage of the animal needs of essential fatty acids (unsaturated), and must be available diet major mineral elements

## 2. Palatable

Increase the amount of feed covered by the animal voluntarily when the deit be palatable containing materials appetite and palatability vary depending on the type of animal, age and degree of hunger and need feed, depending on the temperature and air humidity and others. It is noticeable that the feed concentrated be more palatable coarse dry matter, especially at high temperatures in summer.

## 3. Succulent

Increasingly important to contain the diet on the juiciness feed materials containing a high percentage of moisture green fodder and fodder beet and in the summer and that because of its soothing effect on the temperature where the animals to accept her greedily.

## 4. Highly digestible

There is a relationship between the ability of feed material to digest and content of crude fiber Whenever crude fiber decreased the higher the digestion of organic matter coefficient rose therefore worth of feed for the animal has been found that 65-90% of dry matter concentrates be digestible, while this percentage drops to 50 - 70% of the dry matter of coarse material.

## 5. The diet to be of suitable size Sufficient bulk

The diet should be of an appropriate size and not consist entirely of concentrated feed materials, because they are limited to satisfying the ruminant and cause digestive disturbances, as the ruminating process can only take place in the presence of a certain amount of fiber. If the animal is related to the weight, it is required for every 100 kg of live weight per day to 1.5 kg of dry matter in the case of conservation just like (the dry cow is not pregnant) it rises to 2.5 kg The dry matter in the average production cows increases until it reaches 3 - 3.25 kg dry matter Maximum high yield cows.

#### 6. Suitable mechanical action

They are not streamlined or grabbed, but in the middle and have a laxative effect for the feed material if it contains a high content of moisture, fat or protein (as in green fodder it is fully ripe and with a high content of amides) and substances that affect the green forage laxative and silage and wheat bran.

And the effect of astringent materials, as well as a dry rough material that contains a high percentage of raw fibers such as straw, rice straw, corn, and others.

The gradual transition from animals fed green feed to dry feed or vice versa, over 10-15 days, to prevent digestive disorders.

## 7. healthy

To be free from harmful substances like sand and cut stones and wire, nails and other exotic materials that are free of herbs, grains, seeds toxic and raised pesticides that are free as well as toxic substances and bush be completely free from rot and rancidity and fermentation and insects and offal.

8. Varieties of feed sources

That the diversity and multiplicity of incoming raw materials in the installation of the diet is important for poultry and animals with stomach Statistics as well as for small ruminants, which rumen were not made after in order to avoid to complement deficiencies in certain nutrients, especially in the necessary and some vitamins and amino acids.

As for ruminants, the needs of the protein can be filled from the material or articles of this as well as that of Microbiology can synthesize all its necessary amino acids to build protein body of nitrogen food, whether protein or non-protein covering (NPN) as they can synthesize all set Vitamins B-complex.

#### 9. Economical

And depending on the feed materials resulting in the farm dam most of the nutritional needs of animals and limited to the purchase of the necessary materials needed to feed its budget replenish them, if any.

# 10. Homogenous

And so are the different parts of the mixture being similar in chemical composition and therefore in nutritional value and use a blender Mechanical long enough is important in ensuring the quality of mixing and distribution of raw materials, particularly within small proportions as additives mineral salts, vitamins and antibiotics. etc. and urea so as not to accumulate in the part of the a mixture of feed leads to poisoning of some animals and they die of this and if exposed a mixture of soft feed after the production of transport over long distances, it would be subject to the secession of some of its components from each other, especially if they are very much different in quality density and thus the chemical composition and nutritional value of different layers quality feed is different and so was the use of feed-ROM in the form of cubes or cylinders or grilles or granulators better nutrition in order to ensure the homogeneity of its contents and the stability of its components.

## **B** - Ration computation

Follow the following steps in the daily diet of the animal account:

- 1. The need to know the nutritional value of feed materials available and by reference to the chemical composition and nutritional value of feed materials tables.
- 2. The need to know the recommended dietary needs by referring to the tables of feed rations.
- 3. The need to know the weight of the animal in the morning before fasting diet drink and eat at a rate of once every two weeks in order to calculate the portfolio needs him.
- 4. need to know the type and quantity of animal production in the day so as to calculate the productivity needs him in the case of cattle developing milk added growth needs.
- 5. gathering clipboard needs productivity and needs to know the total food needs of the head in the day of crude protein and energy within the limits of dry matter, which absorbed the animal depending on the case and the level of production (ranging between 1.5 3.25% of live weight.

- 6. cover the food needs of the animal feed materials available and then combines the nutritional values of the quantities of the proposed feed materials and compares the total obtained by the recommended dietary needs them if found significant differences between them, whether in energy or protein being modified in the quantities given different feed materials increase or decrease, as the case even match the total food needs of its nutritional value and so as much as possible, note that it is not supposed to reach a proper diet from the first fight.
- 7. not practical account diet each individual herd separately because this is a waste of time and effort especially if the herd large but divided members of the herd into three groups, for example, depending on the level and weight and production (low, medium and high) and then take the average weight and production for each group calculated the bush on the basis of like a single individual.
- 8. being calculating and adjusting diets groups once every two weeks depending on the change in the weights and production.