

## **EVALUATION OF FEED**

That the process of evaluation study of feed is one of the studies very important and that to know the extent of the possibility of benefiting from the feed. Given to the animal for the purpose of assessing performance in term of body building and production to find out how to take advantage of article for age possible to use the expense (rat of digestion).

### **Estimate the proportion of digestion: -**

The full value of the potential for a food processing a particular type of food material can be estimated by analysis of the chemical but the actual value of the food provided to the animal could be reached after the show into account to loss that accurse during the screening and absorption and representation (mean the part that not absorption of feed and excreted in the feces).

### **Rate of digestion of feed: -**

Is a part of the food that was not screened with faeces which is supposed to be sucked by the animal and result expressed in dry matter and the from factor of a percentage called digestion?

### **Measure the percentage of digestion: -**

Used digestion experiment to Measure rate taking into consideration follow: -

1. Large animal prefers to use male over female for collecting faeces and urine on both encl.
2. Small animal cages equipped with special called cages digestion. being the process of collecting faeces (sheep; goat) Large animal designs her bags especially linking the rear the animal.
3. Supplied quantity of food to be tasted the amount of feed to be tested also measured the faeces of the animal.
4. To be amount of feed to be tested as well as measured stool the outside of the animal but for the Poultry shall be a difficult process because the faeces and urine are common orifice which called cloaca.

5. Mixed with feed to be tested with a bush animal gradually and called the introductory period mean the period return the animal to eat the material and normalize gut on this feed period at last week from the start of the process and the begin then the process of collecting faeces.
6. The begins the process of the experiment is to measure feed intake and output quantities manure and last for 5-15 day and only after don't begin measure compared only two consecutive days of food to provide any negligence consecutive reading.
7. When using large animal and large number required to be identical in term of type; age; weight; sex and so the possibility to overcome the vast difference between individual animal.
8. When use animal laboratory (mice; rat and rabbits) for do not consider evaluating forage thing right for the practical application on their large animal especially (ruminants) so as to difference physiological clear between there can be considered as exploratory result.

### **Method of measure digestibility: -**

Method of measure coefficient of digestion: -

#### **1. Reagent way: -**

Is to add some material to final not digestive and put up with feces can be used.

$$\text{Digestibility} = (\text{faeces} - \text{Reagent in food} / \text{faeces}) \times 100$$

**Example:** - caw eat 9kg hay including 3kg reagent material secreted 8kg feces a count Digestibility.

$$\text{Digestibility} = (9 - 3 / 8) \times 100 = 62.5$$

#### **2. Method laboratory: -**

First, the rumen fluid is withdrawn, and then the feed material is placed in it, and it is in a test tube for 48 hours under anaerobic conditions.

The second phase kill bacteria and exposing then to acid (HCl) under PH certain level and digestion with pepsin for 48 hours.

The part doesn't soluble by filtration dry; burin and extented organic material in food; so, estimated of organic material digestion.

**The validity and effectiveness of the coefficient of digestion: -**

1. The methane liberated from carbohydrate formation processes posed by the loos of animal and out.
2. Not all faeces mean food undigested material and part name enzyme secreted from stomach in addition to some material that are not reabsorbed.
3. In addition to some cellular material from the lining the in testiness of given a diet free of nitrogen it will continue to secreted nitrogen this it called nitrogen faeces repretation.
4. Well as faeces contain small amount of ether extract and some material or ash this came from the faeces using material items spammed in the intestines especially calcium.
5. Value of acquired from the experience of digestion called virtual labs digestion and digestion coefficient different from the real and it is difficult differential between the components of faeces come through the stool that comes directly through food.

**Factors which effect of coefficient of digestion: -**

1. Animal susceptibility.
2. components of the diet.
3. Prepare feed.
4. Age animal.
5. Level of food.