**ANIMAL MANEGMENT PARACTICAL\FIRST STAGE**

**2023-2024**

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**Animal** **nutrition**

Care must be taken to feed animals on sound scientific and economic foundations, as each animal has its own diet that contains certain percentages of digested compounds in order for each animal to get a share of food. The herd can be divided into groups, each group having a similar weight on average once every two weeks, and the animals must be weighed periodically. At a fixed time in the early morning while fasting before drinking and eating food to find out the extent of benefit from the diet.

**Things to consider in the composition and selection of animal food**

1 -The feed provided to the animal must have a taste and smell acceptable to the animal and palatable.

2- Taking into account the quality of feed materials and their suitability for the animal’s digestive process in order to avoid any digestive disorders that lead to the animal’s death.

3- Balancing the diet to include most of the important nutrients, such as fat, vitamins, protein and carbohydrates, necessary for building the body. -

4- Taking into account the costs of the feed, considering that alternative feeds that are cheap and perform the same purpose can be used to feed the animal.

5 - The animal’s ability to absorb the food provided to it according to its need for food. This is because giving the animal larger amounts of feed than it needs leads to digestive problems and thus causes the animal to die.

**Types of feed materials:-**

* **Green fodder materials**: These materials include jet, alfalfa, and horticulture, as well as some types of grasses, barley, and yellow corn. The water content of these materials ranges from about 60%-66%
* **Dry fodder materials**: These materials include grains and seeds (bran, flour, barley), as well as milk and slaughterhouse waste.
* **. Food additives**: There are a group of substances that can be added to animal feed to satisfy the animal’s need for them. These include mineral salts such as calcium, phosphorus, potassium, and vitamins that help the animal not contract diseases that lead to deterioration of the animal’s health and decreased production. A deficiency of any of these elements and vitamins leads to the animal contracting diseases. Several things may lead to the death and destruction of the animal, so it is necessary to add these materials to animal diets to avoid the risk of disease.

**Nutrition of newborns**:

Immediately after birth, the calf is fed on the mother’s milk (cowsop). Cocose milk is considered very important for nourishing newborn calves, especially in the first days of their life. Among ***the most important benefits of colostrum mother’s milk are: -***

1-Easily absorbed by the digestive tract of suckling calves.

2 It contains important nutrients for the growth and nutrition of young calves.

3- It helps prevent diseases.

4- Cleaning the digestive system of young calves

**Characteristics of breast milk (colostrum**) :-

* The temperature of the milk (30-35°C) is close to the animal’s temperature.
* Mother’s milk is given to young calves for 2-3 months after birth
* Milk must be given to calves in specific quantities, as giving large quantities of it to the animal causes digestive disorders in the animal

**. Methods of feeding suckling calves;-**

1. **Breastfeeding**:-

This method is common in rural areas, as the young calf is left with its mother after the birth process to suckle the colostrum milk. The calf continues to breastfeed its mother’s milk during the first month of birth, and after that, the breeder gives the concentrated feed to the young calves after performing the weaning process.

**2- Artificial feeding**

. Artificial feeding depends on providing milk to young calves in special containers in the required quantities according to the age of the animal and its need for milk. The milk containers are placed inside the animal’s mouth so that it gets used to breastfeeding after the fourth day of birth.

**Weaning of calves:-**

1- Weaning at the age of 14-15 weeks. This type of weaning is often used with calves of small sizes.

2- Weaning at the age of 0 weeks. In this type of weaning, the animal is given concentrated feed, hay, and water in the second week of its life.

3-Weaning at 3-5 weeks of age (early weaning). In this type of weaning, concentrated feed is given to the animal in the first week of its life.

**Conditions for weaning baby calves :-**

1-The possibility of the animal eating at least 34 kg of feed per day.

2- The animal’s weight must not be less than 56 kg.

-3 giving water in the first week of giving birth.

**Caring for pregnant cows**

**The most important things to consider for pregnant cows :-**

1- Do not stress pregnant cows with constant movement and walking

2-Remove obstacles in the barn that cause the cow to fall.

3- Giving sufficient food to cows to meet their needs and the needs of the fetus.

4- Do not mix pregnant cows with animals that are sick or have had a miscarriage, and the barn must be cleaned and sterilized well.

**Livestock are divided according to the purpose of their production into:**

1. **A breed specialized in milk production**, including (Friesian, Ayrshire, Jersey, Green, and Brown)

**2- A breed specialized in meat production**, including (Aberdeen Angus, Hereford, Callaway, Highland)

**3-Dual-purpose breed that includes** (Shorthorn, Sindhi) milk cattle. The origin of the Holstein cow breed. The Holstein is one of the most widespread breeds of milk-producing cows in the world. It is considered the wonder of the world in milk production. It is of Dutch origin, from which its name is derived.

**Characteristics of Holstein cows :-**

1- The Holstein cow’s milk production averages 1,336 kg of milk per year, with high quality milk. The importance of Holstein cows lies in their ability to be raised in barns, their high ability to convert feed into milk production, and the ability of calves to grow quickly.

2- Holstein cows can adapt to a number of climatic characteristics, but the mountainous climate in the highlands remains the good and appropriate environment for the breed, and it requires the use of air conditioners in very hot areas of the world.

3- Farms raising Holstein cows can rely on concentrated and compound feed to feed the cows, in addition to the possibility of raising Holstein cows on green fodder only with hay or natural breeding. Biological milk is not available.

**Benefits of milk cow:-**

1- Cow’s milk prevents tooth decay and diseases that affect the mouth, and it also works to strengthen teeth. Cow's milk helps accelerate the growth of nails and hair and lengthen them within a record period when consumed daily and regularly. P of diseases

2- Cow’s milk helps strengthen bones, grow and develop them, eliminate osteoporosis, and prevent them in the future

. 3- Cow’s milk treats diseases that affect the stomach, such as infections and ulcers, and works to prevent their infection and relieve their pain.

4 Fresh cow’s milk helps prevent many types of cancer, such as stomach cancer, liver cancer, kidney cancer, and colon cancer. Of the diet for those who follow a specific diet

5 Cow's milk is considered a special part of people with obesity, diabetes and high blood pressure

**Benefits of beef:-**

1 -It helps regulate blood sugar levels and metabolic processes responsible for digestion. Increasing the strength of the immune system, which leads to increasing the body's ability to resist diseases.

2- Helping the body’s cells to heal quickly and heal when wounds occur. Beef helps maintain a person's sense of smell

3- Protecting the body from anemia due to its ability to maintain the level of hemoglobin in the body. It protects against heart and arterial diseases if consumed in large quantities.