
Feeding of Horses

Horses are herbivores, meaning that their diet is based on plants only, and the horse's digestive system consists of one small stomach that cannot accommodate large amounts of food at once, which prompts the horse to graze for long periods throughout the day to compensate for this, and it is worth mentioning It is necessary to take into account that the pastures in which the horse spends its time are abundant with herbs of good quality, to ensure that it obtains all the necessary nutrients it needs.

The importance of proper nutrition1 Maintaining the animal's survival without health problems or weight loss.

2. Growth is the basis of the production process and an indicator of the success or failure of production in the future.

, the horse's diet includes many foods, including:

Hay: It is taken into account to choose light green hay, free from dust, mold and harmful weeds, and it is worth noting that most of the nutrients in hay are concentrated in its leaves.

Concentrates: are small grains, such as: corn, oats, and barley, and the concentrates contain a small amount of fiber, but they provide the body with great energy, and it must be taken into account that the grains provided to horses are clean, free of insects and mold, They are light in color, and they can also be simply ground or steamed before serving them.

Dietary supplements: Food supplements can be added to horse food if the horse suffers from a deficiency in proteins, vitamins, or minerals. Minerals, including calcium, phosphorous, and salt. Vegetables: Some vegetables can be offered to the horse in limited quantities, such as carrots.

Water: The amount of water that a horse needs daily depends on the temperature, humidity, and level of its activity. A healthy horse needs between 19-57 liters of clean water per day. It is worth noting that horses that do not drink enough water are more susceptible to dehydration. And colic.

Nutrients in horse food and their importance

Horses' food must contain five essential nutrients:

1. **Carbohydrates:** Carbohydrates are found in two forms, either fiber, or sugar and starches, and fiber is abundant in rough feed such as grass and hay, which is the basic food for horses, and transformed thanks to the structure of the horse's digestive system and the presence of its large intestine on microorganisms into energy, while sugars and starches are found mainly in cereals such as oats, corn, and barley, they provide the body with more energy than fiber and are used to supplement a diet based primarily on forage, and to achieve nutritional requirements that cannot be met by feed alone.
2. **Protein:** Horses need protein, because it helps the growth and maintenance of their body, and feed and hay are rich sources of it. The most difficult source of energy to digest and transform into usable energy for the horse, and therefore care must be taken to provide the horse with food that contains high-quality protein without increasing the amount of protein itself, but only the amount that the horse needs, because the excess protein will break down in the body, and turn into excess ammonia, which may lead to problems with the horse's respiratory system.

3. **Fats:** For the horse, fats are an excellent source of energy, and are easily digestible. Fats can be added to the horse's diet through commercial feeds that contain oils, or by adding oils and fat supplements to natural feeds, taking into account that the food provided to horses is balanced, It meets different needs, not just a source of energy.
4. **Vitamins:** Horses need vitamins so that their body can perform vital functions, and vitamin deficiency leads to many health problems, and it is worth noting that horses can form some types of vitamins in their bodies, such as: vitamin C, B, K, and therefore there is no need to supply them from external sources. As for the rest of the vitamins, they can be obtained from green fodder or food supplements that contain vitamins. Vitamins are divided into two types: water-soluble vitamins such as vitamin B, C, and fat-soluble vitamins such as vitamin A, D, and E. K, as the surplus of the first type is excreted outside the horse's body with urine, while the surplus of the second type is stored in its fatty tissues, which may lead to poisoning, and therefore it is not recommended to increase the amount of vitamins more than the required limit.

5. **Minerals:** They are inorganic substances that horses need in specific quantities to maintain body structure, fluid balance in cells, muscle contraction, and other functions. Examples of minerals necessary for horses are calcium, phosphorous, sodium, potassium, chloride, magnesium, and sulfur. Fresh feed contains most of these necessary minerals with the exception of salt, which must be constantly supplied to horses. Nutritional supplements can also be added to horses' food to provide them with their need of minerals. The amount of minerals that horses need depends on the age of the horse, the amount of effort he exerts, and the condition of the mare if she is pregnant or wet nurse.

Types of food harmful to horses:-

The following shows the most important foods that should be avoided from feeding horses, because they may cause him harm:

- **Some garden plants:** Some garden plants are considered poisonous, and examples are: lily of the valley and rhubarb.
- **Meat:** The horse is characterized by teeth and a digestive system that specialize in eating and digesting plants, and although it can eat meat, it is

advised not to allow it to do so because there is not enough information about its long-term effects,

- . Bran: It contains little nutritional value, and eating it leads to an increase in The intake of dietary fiber leads to an increase in the proportion of fiber that makes up the horse's diet, which may affect the intestinal microflora.
- Cattle feed: It is very toxic to horses, because it is supplied with some drugs that harm horses.

Breeding and breastfeeding

- ❖ Pregnant young mare needs additional nutritional decisions of protein, minerals and vitamins more than in its normal condition as well as breastfeeding.
- ❖ For stallions, sperm production and semen quality are related to the feeding method and the amount of fat deposited, which may lead the horse to permanent or temporary sterility in the case of poor feeding with high energy content.

Special feeds for all stages of growth and production

Feeding pregnant and parental (lactating) mares: during pregnancy and after birth, mares need a diet that meets the

needs of their body (not too fat or too emaciated) so that they can:

- ❖ Providing the nutritional needs of the growing fetus.
- ❖ Providing the requirements for milk production and lactation It is known that the nutritional needs of the mare during the lactation period are more accurate than the requirements of pregnancy.
- ❖ Increasing additional nutritional courses to fill the need for work.

Increasing protein, minerals and vitamins is necessary during the growth stage of the young pregnant mare in particular, and given the ability of the female to run shortly after birth, which increases The importance of building bones by increasing minerals and vitamins for the expectant mother

Failure to provide these nutritional needs leads to:

1. The fetus does not develop normally, and the production of milk for breastfeeding comes at the expense of the deterioration of the mother's tissues and body.
2. Protein deficiency affects the future fertility of the mare after parturition, which may be faltering..

Feeding the flankers before weaning

It is well-known that when the flute reaches (120) days of age, he begins to feel sensitive and takes some grains and hay, and the breeder guarantees that he will obtain a well-grown, easy-to-wean, strong-willed animal, he must be accustomed and encouraged to take concentrated feed at the youngest age of those who are accurately Care should be taken so that the fodder is always fresh and free of mold, bitterness and acidity. If the feed reaches (45) weeks, it is safe to eat 200 gm of concentrated feed per day per 40 kg of its weight. When weaning, this amount should be increased. To reach about 300 g or more per 40 kg of live weight or (2.5 3,250 kg of feed per head per day) and the exact amount varies according to the variety and the desired development.

Under this system of management and optimal care, the foal becomes more self-reliant and stays away from its mother more, and it gains half its puberty weight in the first year of life and reaches its full height at ages not exceeding two years. From the above, we can say that if he does not take care of his baby during the first year, especially if he suffers from malnutrition, then he does not It can develop adequately throughout its life.

Feeding the flankers after weaning

It is known that the period between weaning (about 6 months of age) to the first year of life is the most critical period in all horses' lives, because with good and careful management of the weaned flanks, there will be no obstruction or disturbances encountered. At weaning, if this animal has grown and developed independently

Concentrated food and feed during the lactation period.

In general, the weaned fodder should take between (400 - 600 gm of concentrated feed as well as 600-800 gm of coarse hay hay) per day for 40 kg of live weight. Bearing in mind that the amount of feed will vary somewhat depending on the difference in the feed and the quality of the

rough feed. The purpose of education is (show, race, sale). Although physical exercise (specialized trainer) is desirable in terms of making the parents healthy, it works to reduce the daily weight gain rate by about 20%, and this is why many educators turn To suffice with natural sports (jogging and jogging) taking into account not to increase the feed. A horse that is heavily fed and left without work or exercise will become dull and get hurt quickly during play or show, and the percentage of sick horses as a result of increased feeding and intensity is higher than 7 Follow a specific feeding regimen.

Racing horse feeding

It is well known that some defects in horses can be resolved and wounds, and there remains another part that occurs as a result of violent stress, which is beyond the animal's endurance even if it has the finest structures and the best tissues. It appears that nutritional deficiencies are the main cause of the defects in the horses>

