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ECONOMIC AND BIOLOGICAL FEATURES OF CAMELS

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ABSTRACT

The economic importance of camels in the southern arid regions is very high. Domestic camels are highly valued by locals for their amazing features. First of all, the enormous endurance of these animals is striking. It manifests itself not only in the ability to do without water for a long time. For thousands of years, the power of many states of the East literally depended on camels. Only these animals could overcome the endless deserts that cut off these countries from the rest of the world.

The camel is usually called the “ship of the desert”. Meanwhile, the Arab peoples prefer to call ships “camels of the sea”. However, the camel is not only a transport. From time immemorial and to the present, camels have been used as draft power and bred for meat, milk, leather, wool and dung, that is, the animal is able to replace a ram, a horse and a cow. Camel meat is eaten, it is quite suitable for consumption and tastes a little sweet due to the presence of glycogen in it. Beshbarmak is prepared from camel meat, and fat from humps is consumed warm, immediately after slaughter, then it goes for distillation.

KEYWORDS

Introduction

Camel skin is thick and durable, so it is used to make belts, whips and shoe tops. Camel dung is so dry that it is perfect for heating residential premises: its flame is even, smokeless and has high heat transfer rates. Camels are amazing animals that help people survive in very difficult conditions.

The amazing ability of a camel to patiently endure thirst, and heat, and dry winds, to eat thorns has always amazed people. A camel can go without water for a long time (more than two weeks) due to a number of biological features. He uses water very economically and does not sweat even in forty-degree heat. His body is covered with thick and dense hair, which prevents the evaporation of moisture from the body and saves it from overheating (on the back of a camel on a hot afternoon, it is heated to 80 C, and the skin under it is only up to 40 C).

The camel never opens its mouth so that water does not evaporate from the surface of the oral cavity, and it does not breathe as intensively as other animals, because the body also loses water with the exhaled air. In addition, he has a supply of water in the form of ... fat accumulated in the humps. When 100 grams of fat is oxidized in the body, 107 grams of water is formed. Thus, a camel can extract up to 50 kilograms of water from its humps if necessary.

Dehydration in other animals is accompanied by a significant health disorder: with a loss of 10 percent of water, they experience weakness, increased heart rate, thickening of the blood, and a disorder of the nervous system. A camel can shrink by a quarter of its mass. The loss of water by the body of a camel (unlike other animals) does not affect the composition of the blood. True, at the same time, the water content in the tissues of the body decreases. The camel loses weight (shrinks) and becomes like a skeleton covered with leather. But when the animal receives water, it immediately drinks 10-12 buckets and in 15-20 minutes restores its former appearance by saturating the tissues with water. Observations have shown that in a few hours he can drink 186 liters of water, quenching his thirst.

Although the camel is a warm-blooded animal, its body temperature varies widely: at night, when it gets cooler, it drops to 34 0C, and during the day, in the midday heat, it rises to 40-410C.

The organism of other animals can function normally only if the body temperature deviates from the norm by no more than half a degree. The camel has many other interesting features. Nature has shown considerable design ingenuity to protect his eyes from sandstorms and the blinding rays of the sun. Sharply protruding eyebrows and long eyelashes block the path of sand driven by the wind, and partly - sunlight. And the irises of the eyes of a camel are collected in folds that hang like curtains over the pupils.

The camel's nose also has unusual adaptations. During sandstorms, the animal constricts its slit-like nostrils so that the sand does not enter the nose, and the air passes in an amount sufficient for breathing. Near the camel's nostrils there is a small "heat exchanger" that absorbs moisture from the air exhaled by the camel. And this moisture, in turn, is used to cool the air it inhales.

The camel's oral cavity is also peculiarly arranged. The mucosa of the hard palate, cheeks and tongue have numerous hard papillae, grooves and tubercles, which serve to knead and grind food and protect the mucosa from damage by hard spines.

Camels are ruminants. Their body is adapted to the harsh conditions of dry steppes, semi-deserts and deserts. They can go without water for a long time, and also drink salt water unsuitable for other types of farm animals. Camels eat saltwort and wormwood, as well as camel thorn, saxaul.

The ships of the desert are very unpretentious in the choice of food. However, apparently, by this it is more correct to mean their high adaptability to eating desert plants, which are of little use for other animals, and not in general the wide range of plants eaten - euryphagia. This was emphasized by N. M. Przhevalsky: camels that grew up in the desert, once on abundant pastures, lose weight and eventually die. This is partly due, probably, to the great need of these animals for salt. Despite the fact that usually desert plants contain a lot of salts, camels still solonetze, eating saline clay on takyrs, smooth, devoid of vegetation soils.

Camels differ from ruminants in the structure of the stomach. There are three chambers in the stomach: a scar, a mesh and an abomasum. At the bottom of the scar there are two protrusions, called aquifers, where the liquid part of the food accumulates and indirectly helps to create water reserves in the stomach. Even red blood cells (erythrocytes), unlike other mammals, they have nuclei and an oval shape.

Thanks to the calluses on the chest, wrists, elbows and knees, camels can safely lie on the hot sand.

Scientists have established an unusual phenomenon - there is practically no urea in the urine of a camel. It turned out that it enters the rumen fluid, where bacteria immediately use it for protein synthesis. Moving through the gastrointestinal tract, the bacterial protein is digested and absorbed by the body. Thus, the camel has a special mechanism that allows nitrogen to be repeatedly used to restore decayed

protein. In other animals, after deamination of protein amino acids, this nitrogen is already lost for the body and is excreted in the form of urea. The repeated use of nitrogen allows the camel to exist for a long time on a meager ration.

Fascinating stories about the camel made him the most remarkable animal of the desert. He drinks without any consequences salty and bitter-salty water, poisonous to humans and other animals. A Bedouin deprived of water can save his life by sacrificing a camel, in whose stomach he finds liquid to drink.

Indeed, the rumen of a camel contains a significant amount of liquid, which can serve as drinking water for a person in a critical situation, despite the unappetizing appearance and unpleasant smell. A wanderer dying of thirst is ready to drink anything, including the liquid from the camel's rumen.

All camels have excellent eyesight: they are able to notice a person from a kilometer away, and a moving car from 3-5 km away. Animals have a well-developed instinct: they feel the source of water at a distance of 40-60 km, they easily anticipate the approach of a thunderstorm and go to where the showers will pass.

Despite the fact that the majority of these mammals have never seen large bodies of water, camels can swim well, tilting their body slightly to the side. A camel runs amble, while the speed of a camel can reach 23.5 km / h. Some individuals of wild haptagai are capable of accelerating up to 65 km/h.

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