

економічні вигоди як тваринникам, так і процесу відновлення земель та ґрунтів. Разом зі вчасними ініціативами уряду це могло би покращити і прискорити процедури повернення проблемних територій до ефективного використання в сільськогосподарському виробництві, а людей – до нормального мирного життя.

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THE SIGNIFICANCE OF COWS BODY CONDITION SCORE DURING LACTATION IN THE REALIZATION OF THEIR PRODUCTIVE POTENTIAL

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One of the strategic directions of the development of dairy farming in Ukraine is the widespread use of energy-resource-saving technologies, which based on untethered livestock keeping and milking in milking parlors with a high level of automation [1]. However, practice

shows that with such technologies it is not always possible to achieve high levels of milk productivity in harmony with reproductive capacity, health and longevity of animals.

The vast majority of scientists, when evaluating the feeding of dairy cattle, pay considerable attention to the live weight of cows, while the issue of their fatness is less studied.

The evaluation of cow body condition is a direct reflection of the efficiency of feeding management on the farm and allows evaluate how the conditions and condition of cows are monitored at different stages of lactation [2]. Periodic determination of fatness makes it possible to compare the existing condition of cows and adjust the feeding process in one direction or another according to the developed recommendations.

A cow's level of body condition before calving to have a direct effect on potential complications that may occur before, during or after calving, and milk yield and reproductive performance before the next lactation. Fatness as the degree of development of muscle tissue and deposits of deposited internal subcutaneous fat. At the same time, fatness is an indicator of the amount of fat and energy absorbed by the animal.

The level of cow body condition during lactation largely depends on such factors as breed, husbandry technology, feeding, and elements of behavior. Research conducted by a number of foreign scientists on animals of the Holstein breed shows that by regulating (managing) the feeding of cows in different physiological periods, it is possible to achieve an increase in productive and reproductive characteristics. At the same time, feed resources, which constitute the largest component in the production cost of products, used most rationally [3, 4].

Most optimal cow's body condition in the dry season in level 3–3.5 points (on a 5-point scale). This means that the animal acquires such body condition during the late stage of lactation. Animals should not increase or lose this state of body condition during the dry period. Cows that lose fat during the dry period have an increased risk of stillbirth.

The level of body condition should not fall by more than 1.5 points in the interval between the dry period and fertile insemination. At the same time, it was established that the animals that lost more than 1.5 points in terms of fatness during this period had a longer service period (by 4–6 days), less milk yield for the next lactation, and there were cases of difficult calving's.

A low state of body condition before calving reduces the reproductive function, increasing the service period. A fatness level of less than 2.25 points, as a rule, reduces the reproductive function, increases the period until the first arrival in the heat and, accordingly, the service period.

A high body condition score in the dry period (3.75 and above) was also associated with an increase in the length of the service period in many studies, but not in all animals [5]. After a comprehensive analysis of his own nine studies, concluded that in cows that had a fatness score of 3–3.5 points before calving, the duration of the service period shortened by an average of 6 days compared to similar cows that had a fatness level of 2 points or less. In the same studies, it was established that in animals that had high conditions before calving (3.75 points and above), fatty infiltration of the liver ("fatty liver" syndrome) was often observed, which in turn led to a decrease in reproductive functions and productivity.

As is known, cows after calving establish a negative energy balance, in which the need for nutrients for milk productivity is higher than the actual energy consumption of feed. During this period, the cow's milk production takes place at the expense of body nutrients, which leads to a decrease in the live weight of the animal and its level of fatness. The loss of body weight at the beginning of lactation should be limited to a maximum of 1 kg per day, and the reduction of fatness to 1 point. At the same time, it is necessary to ensure a positive energy balance no later than 60 days

after calving or even earlier. One kg of fat mobilized from the depot energetically ensures the production of 7 kg of milk.

Providing animals with energy has the greatest impact on reproductive function. The negative impact manifested both by its deficiency and by its excess. Insufficient supply of energy to a high-yielding cow usually occurs after calving: the highest milk production at this time leads to an excessive load on the metabolism. Under these conditions, such diseases as inflammation of the uterus, absence of estrus, changes in the ovaries, reduction of animal immunity and productivity are not excluded [6, 7].

Based on the above, it can be concluded that today do not have an unequivocal opinion about the influence of the level of fattening of cows in different periods of lactation, the level of its dynamics (decrease or increase) in the dry period from fertilization, from lactation to starting on state of health, productive and reproductive functions. Therefore, these issues require special research, which especially applies to animals of domestic breeds, which include Ukrainian red and black-spotted dairy breeds.

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