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MANAGEMENT OF COW PRODUCTIVITY BY ENSURING DIET WITH ENERGY

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One of the most important problems of the world community throughout its existence is the provision of the population with food. The successful solution of this problem at the present stage of the development of human civilization is hampered by demographic growth and the deterioration of the ecological situation in the world. In the context of the constant growth of the world population and the adverse consequences of scientific and technological progress, more and more high-quality and nutritious food is required [1]

Livestock products account for almost half of all gross agricultural production. In the meat balance of the republic, the products of growing and fattening cattle account for more than 37%. The share of the industry in the marketable agricultural products is 22-27% [2].

Currently, there are a number of problems in the industry associated with violation of production technology, lack of feed and ineffective use of feed, untimely updating of technological equipment, and low level of labor organization. The solution of the listed problems is possible only on the basis of a thorough analysis of the reasons preceding this, which is possible by conducting comprehensive studies covering all aspects of the production process.

In the world, the average milk yield of cows is gradually increasing, but this is accompanied by a decrease in the efficiency of fertilization, an increase in the incidence of mastitis and other diseases, as well as a reduction in the productive use of cows in the herd. Why is this happening? Some experts see a link between increased milk yield and increased morbidity, increased milk yield and reduced reproductive quality. You can find a connection between these factors, mathematical

statistics and multiple regression analysis can find relationships between anything, but in reality, not always high milk yields cause these problems [3,4].

Consider the traditional view of experts on the life of a cow from calving to the next calving (cycle). This view is that the duration of the expected cycle is 365 days. In order for a cow to calve on the 365th day, it must be inseminated on the 65th day after calving. Pregnancy is diagnosed 30-50 days after the above 65th day, although the success of the process may be reduced by stress on the farm, improper herd management and other reasons. Why are they tied to 365 days? This dates back to the time when there were cows that, according to the classic lactation curve, began to give very low daily milk yields and then completely stopped giving milk on the 300 th day.

Modern high-yielding Holstein cows have a more uniform and constant lactation curve, and the optimal duration of the cycle between calving is 385 days or more.

A cow's life cycle from calving to calving consists of descriptive periods. Occurrence of problems in one period affects the duration and course of another period. Improper management of the cow in any of the periods leads to a decrease in the efficiency of the cow's use throughout the cycle and can affect its life expectancy, and "poor" insemination can be the result of improper feeding and management of animals a hundred days before calving, which includes dry period [5,6].

It is well known that providing the diet with energy during the period of insemination of the cow is crucial. The application of this provision in practice means that it is necessary to pay due attention to the energy content in the diet, the functioning of the scar and the consumption of dry matter. Manufacturers see a widespread way to increase the energy content of the diet in increasing the proportion of starch and fat, but this leads to a decrease in the proportion of fiber and quickly comes the moment when the balance of the diet is disturbed.

As in all the leading countries of the world in Ukraine, the priority is the direction of intensive milk production, in which there is a refusal to breed animals that produce products at a high cost or have undesirable economic characteristics. In accordance with the economic requirements, the process of structural changes in the breed composition of cattle is currently underway, which has changed towards highly productive genotypes of dairy cattle, and the process of creating large dairy farms has been intensified.

It is incorrect in the farm to exploit cattle with a genetic potential of 8000-10000 kg of milk in conditions that are designed for a milk yield of 4000-5000 kg, namely, not to take measures in modern technological processes to ensure the normal operation of the rumen. Today, the efficiency of cicatricial digestion has become a basic factor in the competitiveness of milk production and allows to fully realize the ability of cows as ruminants to process cheap raw materials - roughage (including pasture grass) into livestock products at low costs of other resources. These processes strongly depend on the energy value of the main, the selection of strong feeds (concentrates), fiber content, including structural and a number of other conditions.

When planning an annual productivity of 6500-7000 kg of milk, the energy concentration in the diet should be 11.4 MJ OE. It consists of an equal ratio of basic

and concentrated feed on dry matter (DM). Procurement of basic feeds with an energy concentration of less than 10 MJ / kg DM will not effectively achieve this goal, because it will require concentrated feed with a nutritional value of more than 13 MJ / kg DM [5.6].

Basic feeds with 10.5 and more MJ / kg of CF will already allow you to optimize the diet and choose cost-effective concentrates. The table shows that with increasing productivity there are new requirements for concentrated feed from the standpoint of their energy value (in this example, to balance the diet requires feed above 11.4 MJ/kg DM). This significantly changes the approaches to the formation of the feed balance of the enterprise and a number of traditional concentrated feeds (located in the table below the line "hopes 6500") is no longer suitable for optimizing the diet.

The principle of selection of concentrated feed

Feed	kOE	kDM
	МДж/кг	МДж/кг
Vegetable oil	26,80	-
Meal, soybeans	13,52	496,00
Wheat, grain	13,41	127,00
Barley, grain without films	13,33	126,00
Corn, grain	13,27	105,00
Potatoes	13,08	96,00
Fodder beet	12,82	82,00
Barley, grain	12,76	118,00
Rapeseed meal	12,40	380,00
Molasses	12,29	100,00
Beet pulp	11,60	99,00
Hope 6500 kg	**11,40**	**160,00**
Meal, sunflower	11,00	331,00
Oats, grain	11,20	121,00
Beer grain	10,91	253,00
Bran, wheat	9,92	160,00
Haylage of cereal grasses	9,26	142,20
Hay	8,00	110,20

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ФОРМУВАННЯ МІКРОКЛІМАТУ В ПРИМІЩЕННЯХ ДЛЯ УТРИМАННЯ ВЕЛИКОЇ РОГАТОЇ ХУДОБИ

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Більшість сільськогосподарських тварин значну частину часу розміщуються в обмеженому просторі. Це вимагає особливої уваги до умов, в яких вони містяться. Мікроклімат тваринницьких приміщень визначається цілим комплексом чинників. Серед них – фізичні параметри: вологість, атмосферний тиск, освітленість, температура, швидкість переміщення повітря. Чималу роль відіграє якість повітря – концентрація шкідливих газів і мікроорганізмів, запиленість. Параметри мікроклімату впливають не тільки на продуктивність тварини, але і на його здоров'я. Щоб не завдати шкоди здоров'ю тварини і добитися бажаної продуктивності, ці параметри необхідно регулювати за допомогою спеціального обладнання [1,2].

Мікроклімат тваринницьких приміщень для великої рогатої худоби формується під впливом сукупності параметрів хімічного, біологічного та фізичного характеру. Вплив мікроклімату на організм може бути прямий або непрямий. Важливе значення має кліматична зона, де розташовується тваринницька ферма. Впливають матеріали для побудови, тип конструкції будівлі, а також технологія, по якій утримуються тварини. Органічний пил, яка з'являється при роздаванні кормів, прибирання або чищенні тварин, подразнює органи дихання, стає причиною сверблячки, запалень, сприяє появі інфекцій. Норма вмісту пилу для дорослих тварин – від 1,0 до 1,5 мг/ м^3, для молодих –