



Explanatory note on feeding and physiology of COWS

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Abstract: Grouping of cows by production groups

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Introduction: The normal gestation period of cows (pregnancy) is 270-285 days. For proper reproduction of the herd and adequate lactation, the cow must produce a calf 1 time per year, while the cow must be fertilized no later than 85 days after calving (2 or 3 estrus after calving). After calving, the cow must give milk for the next 305 days (normal lactation). For effective and proper feeding, all animals in the herd must be kept in different nutritional groups and feed according to their productive or physiological needs:

Materials and methods:

1. Dry period of the first period of dryness (on the 218-223 day of pregnancy, the cow is drained (they make it a start and transfer it to a dry regime of maintenance and feeding for 45 days - until the onset of the transit period of dryness)

In the last 60 days of pregnancy, the cow is in the dry period (during this period there is an accelerated growth of the fetus) and the mammary gland is prepared for the next lactation. In these final days of pregnancy (218-263 days of pregnancy), the nutritional requirements of cows are minimal in their energy-protein needs (11-12% protein and 1-1.2 μ al of pure milk energy per kilogram of dry matter of feed). In addition, rations for dry cows should be limited in total volume, and mineral-vitamin composition. On average, during the dry period, cows should consume about 2-2.5% of the dry matter of the feed on . live weight. These limitations are associated with the prevention of obesity of cows and the possibility of overdevelopment of the fetus, which can lead to complications during and after calving and can prevent the complete milking of cows, and the onset of the next pregnancy. A dry diet is served from the first day of the dry period (218 days of pregnancy to 263 days of pregnancy.). After that, the cow is transferred to a transit dry diet.100 kr

2. Transit period the second period of the dry period
(preparation for calving and maximum milk yield)



The last 15 days before calving (263-278 days of pregnancy), the cow is fed a transitional (transit) diet. The purpose of preparing and eating a transit diet is to prepare the gastric microflora and internal metabolism of the cow for a sharp (on the first day after calving) transition to a very energy- and protein-rich digestible diet.

3. Milking period

(bringing the cow to the maximum possible milk output)

During the first 50-60 days after calving, the cow's body is able to increase milk production to the so-called peak lactation - its maximum at the moment of development of the animal's body. The maximum milking is achieved by 2 factors :)

1) the most complete release of the mammary gland of the cow from the produced milk - correct and thorough milking 3 times a day (evenly after 8 hours) the complete release of the cow's udder from milk is achieved by the correct preparation of the cow for milking (comfortable conditions in the milking parlor, preliminary massage of the nipples).

2) feeding the cow to the fullest (at the request of the cow) with a special milking ration (18.5-19% protein and 1.67-1.74 Mcal of pure milk energy in each kilogram of dry matter of feed). When peak lactation is reached, cows are able to consume a maximum of 4 and slightly more% of the dry matter of the feed from their live weight.

The milking diet has a slightly overestimated protein component (18.5-19% protein) and this not only allows, but even provokes (forces) the cow's body to develop the mammary gland and milk production as much as possible. Each additional liter of milk reached by the cow at the peak of lactation allows the animal to produce 250 additional milk before the end of lactation. 300 литров Usually, by the end of the milking period, the cow is able and should be fertilized.

4. Post-milking period

(High-yield period - the period of maximum profitability)

After reaching the peak of lactation, the cow begins to gradually reduce milk production and feed intake (by an average of 6-9%) for each month. But still, for the next 3-5 months, the cow is able to produce a sufficiently large amount of milk, when consuming a diet containing, depending on productivity, from 17-18 to 15% of protein. Usually, in the high-milking period, the cow produces the cheapest milk at cost. Total dry matter intake of feed with a decrease in lactation also decreases from 4% at the peak of lactation to 3% by the middle of lactation and then to 2% by the dry period, to which the cow is transferred to 218-223 days of pregnancy.

On the most developed farms, a group of primordial cows is additionally created. This achieves the maximum possible dairy development of highly productive animals.



In addition, it can be economically profitable to create medium or low-yield groups of dairy herds, sometimes a separate group of problem cows is created to improve milking and prevent mastitis, usually milked by the very last (lame, tightness, subclinical mastitis, etc.).

Animals in these additional groups have their own special feeding needs, which must be met by specially calculated rations.

Inference. With proper feeding, we will get a healthy calf, the cow will come out in time for dead wood, we will get the maximum yield, affects the health of cows. Even with proper feeding, cows are inseminated during the time. To get high productivity and a healthy calf, you must comply with the above indicators.

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