# OF CATTLE KETOSIS THE CAUSES OF THE DISEASE PREVENTION AND TREATMENT MEASURES

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Abstract. Ketosis of cows is a polyetiological disease, the main causes of the disease are energy deficiency, high-protein feeding, and fatty acid-preserving foods. Illness milk in 6-10 weeks of giving, milk harvest to be for necessary of energy deficiency due to obvious it will be fine. Keywords: ketosis, coarse foods, hyperesthesia, puerperal paresis, resistance.

#### Introduction

Ketosis is mainly observed as a result of the breakdown of nutrients in the large stomach when there is a lack of coarse nutrients in the animal diet in farms where high concentrate feeding is introduced. In many cases, the reason for cows becoming ill with ketosis is the feeding of foods containing a large amount of oil and acetic acid (silage, silage, hay, barda).

### Literature review and research methodology

Symptoms of ketosis In newborn cows, during the acute course of the disease, occasional restlessness, agitation, and increased skin sensitivity (hyperesthesia) are noted. Arousal alternates with lethargy at speed. The animal often lies down in a weakened, sleepy state. Abdominal movement is weakened, constipation or prolonged severe diarrhea is observed. A state of soporosis or coma is noted, as during labor paresis. In the semi-acute and chronic course of ketosis, the diseased animal has a sloughing of the skin covering, a decrease in the shine of the hooves, weakness, lethargy, slow standing up and slow movement, changes in appetite, reluctance to eat soft foods and rough foods, root vegetables with an appetite. consumption is observed. The movement of the large abdomen periodically decreases, the contractions are weak, short, and the bowel movements are irregular. At the beginning of the disease, breathing is accelerated. In most animals, the level of obesity and productivity decreases, the sexual cycle is disturbed. The service period is lengthened or there is a short stay, calves are born in a hypotrophic state, and due to a decrease in the body's resistance, they are prone to digestive system and other diseases.

**Discussion**. Disease treatment. Diseased animals are fed a diet with quality hay (8-10 kg), grass meal (2-3 kg), hay (8-10 kg), root vegetables (8-10 kg) or potatoes (6-8 kg), barley groats are given as mixed feeds. Protein and energy nutrition is regularized. When it is found that there is an excess of proteins in the diet, the feeding of liquid feed is reduced, and it is enriched with high-quality hay, silage and root vegetables. In order to maintain the normal amount of glucose and glycogen in the body, in order to ensure the normal functioning of the digestive tract, heart and other organs, for 2-3 days, at the rate of 0.25-0.5 g/kg intravenously 10- 20% glucose solution is injected 1-2 times a day. 100-150 HB insulin is injected intramuscularly 1-2 times a day. Hydrocortisone, dexamethasone, and corticotrope hormonal drugs are used according to the prescription. 150-500 g of sugar or other glycogen agents: sodium propionate, sodium lactate, propylene glycol, glycerin, etc. are used orally.

**Summary.** Disease prevention measures. In order to prevent ketosis, it is necessary to ensure that the amount of fiber in the diet, the ratio of sugar to protein is at the standard level, to

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avoid protein excess and energy deficiency, and to avoid long-term high -protein diet and silageconcentrate feeding. The diet of high-yielding cows should include 6-8 kg of hay, 8-9 kg of beets or 5-7 kg of potatoes. Mixed feeds should make up 40-45% of the cows' diet during the period of increased lactation, and 25-30% during the period of reduced productivity. The amount of klechatka in the dry matter of the diet is 24-28% when the daily milk yield is 10-20 kg, 20% at 21-30 kg, and 16-18% when it is more than 30 kg, for beef cows during the weaning period. - It should be 25-30%. In standardized rations, 0.8-1.2 sugar should correspond to 1 g of digestible protein, and the ratio of sugar and starch to digestible protein should be 1:1. To the animals to be given silage should have a pH of -3.8 -4.2, in its composition oil acid not to be need Quality senage to 45-55% humidity has a pH of around 4.2-5.4 is in its composition oil acid it won't be. Planned respectively grow, strait of cows very proteinaceous and high energetic of feeding prevention get, mom in animals of the year each in the quarter one times regularly dispensation held stand up prevention of ketosis in getting big important have. ### Conclusion on Cattle Ketosis: Causes, Prevention, and Treatment

Cattle ketosis, primarily affecting dairy cows, is a metabolic disorder characterized by high levels of ketone bodies in the blood, urine, and milk. It typically occurs during the early lactation period when energy demands exceed energy intake, leading to negative energy balance.

1. \*\*Energy Deficit\*\*: The primary cause is an imbalance between energy intake and energy expenditure, especially during early lactation when milk production peaks.

2. \*\*Fat Mobilization\*\*: When cows cannot consume enough energy, their bodies mobilize fat reserves, leading to the production of ketone bodies.

3. \*\*Dietary Factors\*\*: Poor-quality feed, inadequate carbohydrate intake, and imbalanced rations contribute to ketosis.

Prevention:

1. \*\*Nutritional Management\*\*: Ensure a balanced diet with adequate energy density, especially during the transition period from late gestation to early lactation.

2. \*\*Monitoring\*\*: Regular monitoring of body condition and ketone levels helps in early detection and management.

3. \*\*Feed Additives\*\*: Use of feed additives such as propylene glycol and niacin can help prevent ketosis by providing an immediate energy source and improving metabolic function.

4. \*\*Proper Transition Management\*\*: Effective management of the transition period, including proper dry cow nutrition and stress reduction, is crucial.

Treatment:

1. \*\*Energy Supplements\*\*: Administration of propylene glycol, glycerol, or other energy supplements to provide readily available glucose precursors.

2. \*\*Intravenous Glucose\*\*: In severe cases, intravenous administration of glucose can rapidly reduce ketone levels.

3. \*\*Hormonal Therapy\*\*: Use of corticosteroids can help in mobilizing glucose reserves.

4. \*\*Supportive Care\*\*: Ensuring adequate hydration, balanced electrolytes, and addressing any secondary infections or complications is essential.

Effective management of ketosis involves a combination of good nutritional practices, regular monitoring, and timely intervention.

By maintaining a proper energy balance and closely observing cows during the transition period, the incidence of ketosis can be significantly reduced, ensuring better health and productivity of the dairy herd.

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