# THE EFFECT OF THE DRUGS “TRIVITAMIX” ON THE CLINICAL INDICATORS OF CALVES

**[1]Rejepbayev J. E., [2]Farmonov N.O., [3]Sulaymonov M.A.**
[1]Basic doctoral student
[2]Scientific supervisor, SamSUVMAHB, c.v.s., associate professor
[3]Head teacher of SamSUVMAHB (PhD)
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***Abstract.*** *This article describes the clinical signs, diagnosis of hypovitaminosis Diseases A and D in calves.*
***Keywords:*** *dispensary examinations, clinical signs, in calves, hypovitaminosis A and D.*

Based on the strategy of actions for the further development of the Republic of Uzbekistan, it becomes important scientific and practical to meet the demand of the population for livestock products and ensure food safety, increase the production of livestock products, treat and prevent infectious and non-infectious diseases of animals, introduce modern improved methods and means into production.

In the decisions of the president of the Republic of Uzbekistan on January 29, 2020 PQ-4576 "on additional measures for the state support of the livestock network"and February 8, 2022 PQ-121 "measures for the further development of livestock and strengthening the feed base", there is a great role in the development of livestock, as well as the role of Veterinary. The development of this sector in many ways entails providing the industry with mature, educated and highly qualified veterinarians and the industry with new effective modern veterinary medicines. In order to provide the veterinary sector with new modern veterinary medicines, after the independence of our country, our government was allowed to apply new modern medicines produced in the developed countries of the world's veterinary pharmaceutical industry to the veterinary practice of our country.

Vitamin preparations produced in Uzbekistan by the newly established plant of Uzbekombinate farm are widely used in animal husbandry. One such drug is the drug “Trivitamix”. It is produced by the Uzbek pharmaceutical campaign Biveco. This drug is a multivitamin drug and has been recommended for use in cattle sheep, goats, pigs and poultry.

Hypovitaminosis A and D has been studied as a separate disease in young calves on livestock farms in the Republic of Karakalpakstan. However, among young calves, in later years, hypovitaminosis A and D is not noted in veterinary reports without a good study, while among young calves, the prevalence of the disease indicates insufficient attention to the production of complex measures in combating them. Digestive processes are disrupted by insufficient development of enzymes due to low resistance of the body to unfavorable external environmental influences, morphofunction deficiencies of the digestive canal glandular epithelium. In the calf, general malaise increases, there is a decrease in appetite, weight loss, stay from growth, conjunctivitis, whitening of the mucous membranes of the oral cavity and nose.

**The purpose of the study**: To study the effect of the drug “**Trivitamix**” in the Prevention of hypovitaminosis Diseases A and D in calves.

**Tasks of research.** In order to study the effects of ” **Trivitamix**", improve the causes, features of development, identification of clinical indicators and methods of their prevention of hypovitaminosis A and D in calves.

**Object and styles of research.** Our experiments were carried out at the first stage on calves on the cattle farm “Amir oq chashma” in the Ellikka'la District of the Republic of Karakolpagistan.

For the first stage experiments, relatively frail 15 heads of 3-month-old calves were selected. Calves were selected and experiments were carried out on the basis of 3 groups, calves from 5 heads in each group on the basis of “similar pairs”.

With clinical examinations, the general condition of the calves, appetite, mucous membranes, obesity rate, skin and skin covering, the condition of the organs of movement were determined.

The storage conditions and feeding of calves were analyzed, in which the indicators of the microclimate in the molts, the condition of the floors, the composition and satiety of food rations were studied.

Control in their experiments and 2 experimental groups did not apply the drug to the control group, the first experimental group of calves were injected from the drug “**Trivitamix**” in 7 days between 1 ml of muscle per 20 kg of live weight. The second experimental group was sent to calves from the drug “**Introvit**” from 1ml per 20 kg of live weight to between muscles once a week.

Clinical indicators of control group calves were found to be an average of 39.3 ±0.030 S at the beginning of experiments, compared to an average of 38.9±0.020 S by the end of experiments. The average number of heartbeats per minute was 130.6±4.5 times, while by the end of the experiments a thinning of 125.4±4.2 times, with a 1-minute breathing frequency of 57.7±3.5 times to 55.8±2.9 times was recorded.

The body temperature of the calves in the first experimental group averaged 39.4±0.040 S at the beginning of the experiments, while the average was 38.4±0.020 S by the end of the experiments. While the average number of heartbeats per minute was 131.5±4.6 times, by the end of the experiments, thinning of 110.5±3.6 times, 1 minute breathing frequency from 60.4±3.6 times to 49.6±2.6 times was recorded.

Calves in the second experimental group had an average body temperature of 39.5±0.04 S at the beginning of the experiments, with an average of 38.9±0.02 S by the end of the experiments. While the number of heartbeats per minute averaged 140.6±4.5 times, by the end of the experiments, an average of up to 132.8±3.7 times was recorded,thinning the 1-minute breathing frequency from 60.9±2.6 times to 56.9±2.5 times.

Clinical indications of lambs in experiments

| **Groups** | Time of experiments | Tana harorati $^{oo}$S | Number | |
|---|---|---|---|---|
| | | | Puls in a minute | Breath Per minute |
| - | In the beginning | 39,3±0,03 | 130,6±4,5 | 59,7±3,5 |
| | After 7 days | 39,3±0,04 | 128,2±4,4 | 59,1±3,4 |
| | After 14 days | 39,2±0,03 | 126,8±4,3 | 57,9±3,3 |
| | After 21 days | 39,1±0,04 | 125,9±4,3 | 56,7±3,1 |

| | | | | |
|---|---|---|---|---|
| | After 28 days | 38,9±0,02 | 125,2±4,2 | 55,8±2,9 |
| First experiment | In the beginning | 39,4±0,04 | 131,5±4,6 | 60,4±3,6 |
| | After 7 days | 39,2±0,03 | 126,1±4,2 | 58,2±3,4 |
| | After 14 days | 38,9±0,03 | 121,5±3,9 | 55,3±3,1 |
| | After 21 days | 38,6±0,02 | 116,9±3,8 | 52,5±2,9 |
| | After 28 days | 38,4±0,02 | 110,5±3,6 | 49,6±2,6 |
| Second experiment | In the beginning | 39,4±0,03 | 131,1±4,4 | 60,2±3,4 |
| | After 7 days | 39,2±0,03 | 127,5±4,2 | 58,9±3,2 |
| | After 14 days | 39,1±0,03 | 122,5±4,1 | 55,6±3,1 |
| | After 21 days | 38,8±0,02 | 119,1±3,8 | 53,3±2,9 |
| | After 28 days | 38,6±0,02 | 115,6±3,8 | 50,7±2,7 |
| | R< | 0,03 | 0,07 | 0,05 |

During the experiments of the calves of the experimental group, the clinical signs characteristic of vitamin metabolism disorders in the animal body gradually decreased. Clinical signs such as improved appetite, more active movement, increased response to external influences, a pale purple tint of the visible mucous membranes were observed in these groups.

At the end of the experiments of some calves in the control group, clinical and physiological indicators characteristic of a violation of vitamin metabolism in the body were preserved: indifference to external influences, changes in appetite, thinning of rashes and whitening of mucous membranes, movement of incisors.

**Conclusion:** the occurrence of hypovitaminosis Diseases A and D in calves the lack of improvement of the diet does not fully satisfy the needs of the calf's body in relation to nutritious and active substances.

In order to prevent hypovitaminosis Diseases A and D in calves on cattle farms, it is good to use the drug “Trivitamix” to send them between the muscles from 1ml per 20 kg of live weight once a week.

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