

# PHYSIOLOGICAL AND BIOCHEMICAL PROCESSES IN THE BODY AND PRODUCTIVITY OF RABBITS RECEIVING SILICON COMPOUNDS WITH WATER

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Research was carried out on rabbits breed calves *Hyla* divided into six groups (control and five research), 6 animals each, selected on the basis counterparts aged 41 days.

Rabbits in the control group fed without restriction balanced granulated feed with free access to water.

Animals I, II and III groups were fed feed ration control group and throughout the day nano forms silicon, the rate of under 25; 50 and 75 mcg Si/kg body. Rabbits IV and V groups were fed feed intake of the control group and asked to water sodium metasilicate ( $\text{Na}_2\text{SiO}_3\text{H}_2\text{O}$ ) in an amount of respectively 2,5 and 5,0 mg Si/kg body weight. In the 83 and 110 days of life (31 and 58 days research). The experiment lasted 68 days, including a preparatory period of 10 days research - 58 days. In the preparatory period - 52 days and a trial - by 83 and 110 days of life (31 and 58 days of watering silicon compounds).

The impact of adding different amounts of nano forms of Si and sodium metasilicate to the diet of rabbits aged from 52 to 110 days on total protein content transamination enzymes activity in the blood and body weight gain after weaning are presented.

It was found that the addition of silicon nano forms to the rabbit diet increases the content of total protein and transaminase activity in the blood of rabbits at 31 and 58-day studies as compared to the control group.

In rabbits treated with silicone citrate for 58 days a higher body weight and average daily gain at 83 and 110 days age, compared with the rabbits of control group were found.

**Keywords:** RABBITS, BLOOD, NANO FORMS SILICON, SODIUM METASILICATE, PROTEIN, AMINOTRANSFERASE, PRODUCTIVITY.