

THE INFLUENCE OF STARTER CONCENTRATE ON THE CALVES' GROWTH RATE IN THE FIRST MONTHS OF THEIR AGE

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Summary. We can not expect to have a good cow with genetic potential from the heifer that was fed poorly. But in many farms of the country stock heifers are fed extensively average daily weight gain is only 500 to 600 g per day. Little daily weight gains are received because of old technologies for calves' growing. They are watered with milk or other drink for long time, so in the third week the lack of energy and food matter is observed. Besides, liquid feed discourages the ruminal development. When rumen begins functioning, calves' appetite gets better; they eat more, grow and develop faster. Research has shown that the formation of ruminal papillae and the level of development are stimulated by concentrates. Calves get a lot of energy and necessary nutritious matter from them. Besides, they need less milk. Many farmers give this feed to calves at one mo of age or even older. We have carried out the experiment to find out the influence of starter concentrate Mulli Maikki 1 E on the calves until three mo of age. The tests were carried out at three farms in the year 2001 and 2002. There were control and experimental groups (4–6 calves in each group) in every farm. The calves were fed by the usual program and received the same (except the concentrates) feed. From the third to fourth day of age (at Skėmiai farm from d 20) the calves from control group got the concentrates made at the farm (barley meal); the calves from experimental group got starter concentrate Mulli Maikki 1 E. The milk was given by the norms of the farms; concentrate, hay, silage and haylage were available ad - lib. During the experiment we carried out the accounting of used feed and the change of the calves' weight.

During the three month experiment every calf from experimental and control groups used about 437 kg milk, 60 kg silage, 30 kg haylage. Besides, every calf from the control group got about 57.0 kg hay and 56.3 kg concentrates, and every calf from the experimental group got 61.0 kg hay and 84.7 kg concentrates. During the first month no considerable difference in growth was observed. In the second month the calves from the experimental group gained about 810 g or 18.2 % of weight and in the third month—about 894 g or 24.8 % more than calves from the control group. During the period of the experiment the growth of calves in the control group was about 686 g per day and the growth of calves in the experimental group—791 g or 15.3 % bigger.

Keywords: calves, concentrates, daily weight gain.