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CONTENT OF NON-ESTERIFIED FORMS OF FATTY ACIDS IN RED BLOOD CELLS OF COWS IN THE DRY AND POSTPARTUM PERIODS AND THEIR CORRECTION

It was defined concentration of non-esterified forms of fatty acids in the dry and postpartum periods in red blood cells of cows with different milk productivity. It was installed their dynamics contents depending on the physiological state of animals and the effect of biologically active agents, relationship with the course of the postpartum period and fertility of cows.

It was revealed that for 25–30 days before birth, in cows with milk yield 4800–5200 kg of milk per lactation, the content of saturated, monounsaturated and polyunsaturated non-esterified forms of fatty acids higher, respectively, 10,4; 9,8 and 7,7 percent, than in animals with milk yield 3850–4150 kg. Before calving (5–7 days) cows with higher milk productivity prevailed over low productivity ones for the content of docosatetraenoic acid on 25,6 %, and after delivery (10–14 days), respectively with the content of linoleic and eicosapentaenoic acids by 25,9 and 22,0 %.

The use of cows of aloe for 25–30 days before delivery reduces before calving (5–7 days) and after (10–14 days) content of unsaturated and increases in saturated and monounsaturated and polyunsaturated fatty acids, which indicates an increase in the permeability of cell membranes and increase metabolic exchange between the cell and the external environment. Also in these cows for 5–7 days before calving set significantly higher content of linolenic and eicosatetraenoic (arachidonic) acids, the difference is reliable and was in low-yielding cows, respectively for 13,0 and 16,6 %, in high productive ones – 19,1 and 18,7 per cent. At the same time, in high yielding cows compared to low-yielding ones observed reliable higher content of linoleic on 14,6 %, eicosapentaenoic acid for 19,0 % and docosatetraenoic on 26,5 % of the fatty acids.

At 10–14 days after calving in high-yielding cows compared to low-yielding ones was set the increase in content of linoleic, eicosapentaenoic, docosatetraenoic and docosapentaenoic acids, respectively, by 22,8; 19,6; 21,4 and 17,5 %.

The introduction of cows of aloe extract provides after calving accelerated normalization of the physiological state of the birth canal,

restoration of the full sexual cycles, increase the impregnation capacity and the reduction of service period.