Milk urea level of dairy cows in Northern Kazakhstan

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The goal of the study was to introduce milk urea indicator in Republic of Kazakhstan by the experience of USA and Canada milk labs.

The following objectives were set:
to carry out control milking in dairy farms;
to analyze the composition of milk;
to estimate the relationship between daily milk yield and the milk urea content

The object of the study was Holstein cows at the Agrofirm Rodina LLP and Esil-Agro LLP of Akmola region

Analyzes were carried out at an accredited milk laboratory on a CombiFoss FT + milk analyzer
Milk productivity was determined by the monthly control milking. Milk samples were taken in accordance with ICAR requirements

Table 1: Milk productivity and composition of dairy herds in the Akmola region of the Republic of Kazakhstan

№	Farm	305 days lactation yield, kg	Service period, days	Fat, %	Protein, %	Milk Urea, mg %
1.	«Rodina Agro Farm» LLP	7446,0±56,9	175,0±3,97	4,44±0,04	3,63±0,01	34,25±0,29
2.	«Esil Agro» LLP	7456,0±86,0	160,0±5,8	3,54±0,04	3,39±0,02	11,7±0,18

It is concluded that in Northern Kazakhstan dairy farms, milk urea content can serve as an indicator of protein and energy in cows diet and allow rational use of expensive protein feed, maintain animal health and increase production efficiency.