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(12) **ABSTRACT OF INVENTION**

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(54) **METHOD FOR INCREASING THE PRODUCTIVITY OF DAIRY COWS OF VARIOUS GENOTYPES OF THE PON1 GENE**

(57) Abstract:

FIELD: biotechnology.

SUBSTANCE: invention relates to the field of biotechnology. A method for increasing milk productivity and milk quality of dairy cows is claimed, which includes genotyping Holstein cows for the PON1 gene with the identification of animals with AA, GA, GG genotypes and the inclusion of an antioxidant additive in the diet of highly productive cows in the first lactation period, mainly with GA and GG genotypes - 4 ,4-bis(2,6-di-tert-butylphenol) (commercial name "Bisphenol-5"), at a dose of 2 µmol

per 1 kg of live weight (0.5 g/animal per day) for 100 days (t.e first period of lactation).

EFFECT: invention makes it possible to optimize physiological and biochemical processes in the body at the gene level and provides an increase in the milk productivity of cow populations with GA and GG genotypes by 7.9-9.2% with its high quality. At the same time, the costs of metabolic energy and crude protein of the diet per unit of production are reduced by 7.3-8.4% and 7.3-8.3%, respectively.

4 cl, 5 tbl

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