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Opinion Regarding the Influence of the Energy Stimulator type ADR-4 for the Process of Milk Fermentation

The ceramic disc ADR-4 was used in the research. The ADR-4 was obtained from ADR Systems, Gdansk, Poland.

The milk fermentation process was carried out using uncontaminated bacterial culture that is used in the standard production of yoghurt and granulated cottage cheese. Natural and fruit flavoured yoghurt was produced for the purpose of this research. For the production of flavoured yoghurt, prior to the fermentation process, 4% sugar was added to the milk. The tests were carried out in 2 litre beakers at a temperature of 43oc for yoghurt production and 30oc for cottage cheese production. All experiments were carried out three times.

On the basis of the test results, it was proven that the influence of the ADR4 has an advantageous influence on the process of manufacturing both natural yoghurt and cottage cheese. In the case of natural yoghurt the correct pH of the finished product was obtained after 2.5 hours. The controlled (without ADR4) process of making sour milk took one hour longer.

The positive influence of the ADR4 was also proven for the process of producing sour milk with milk fermentation bacteria that is used in the production of granulated cottage cheese. The process of obtaining the correct pH level at 30oc with the ADR4 took an average of 3 hours, which was 30 minutes faster than the controlled samples (without ADR4).

On the basis of the experiments and the obtained results, we can categorically state that the energy stimulator ADR4 had a positive effect on the time taken for the fermentation process. These experiments were carried out independently of any producer of dairy products.

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