

The study of antioxidant potential of commercially valuable starter cultures of lactic acid bacteria

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Abstract

© 2016, International Journal of Pharmacy and Technology. All rights reserved. One of the main causes of pathological changes in the human body, leading to the development of many diseases such as cardiovascular disease, cancer, diabetes, Alzheimer's disease, and premature aging is an excessive accumulation of oxygen free radicals in the biological fluids. To prevent oxidative stress in recent years a lot of attention is paid to antioxidant therapy, i.e., providing the necessary amount of antioxidants, primarily natural, in the diet. The paper studies the antioxidant potential of new biotech valued cultures of lactic acid bacteria, that are recommended for the production of fermented functional foods. The study of antioxidant activity of lactic acid bacteria was carried out at the level of cell extract and at the level of extracellular metabolic products. It was found that all investigated new strains of lactic acid bacteria (*Lbm. Delbrueckii*, *Lmb. casei*, *Lmb. curvatus*) had a high antioxidant potential. The strains of lactic acid bacteria *Lbm. casei* and *Lbm. curvatus* with the highest antioxidant properties can be recommended for being included into the starter cultures for the production of fermented functional food stuff of different meat.

Keywords

Antioxidant activity, Lactic acid bacteria, Lipid oxidation