

## IMPROVING TRAINING IN FOOD MICROBIOLOGY

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### Abstract

Microbiology is a fundamental discipline in university programs aimed at training specialists - microbiologists of a wide profile. The main goal of any of these programs is to find an appropriate balance between the basic concepts of microbiology and the practical skills necessary for the work of specialists, including professionals in the food industry.

Training also includes requirements for the organization of a laboratory for microbiological work, quality control of food and raw materials in accordance with regulatory standards, including sampling, the use of traditional and new rapid detection methods, identification and quantification of dangerous microbes in samples. Particular attention is paid to control methods the presence of antibiotics in foods that cause multiple drug resistance of pathogens, ways to reduce microbiological hazards in food products. On the other hand, with increasing knowledge of probiotics, reliable results of the content of useful microbiota in products are needed. Students, masters, as well as professionals to improve their skills through the International Center for Biotechnology at Moscow State University take part in the training. Educational and methodical manuals on methods of microbiological work, detection of dangerous infections, colonizing products, permissible levels of their presence in the product, state quality standards have been published.

Over the past decade, most microbiology courses in the field of food have developed, quality control methods have been improved, in addition to basic knowledge of the microbiology of food, critical thinking skills have been acquired in solving safety problems, as well as in the creation of biologics and food additives that enhance biological value for the benefit of human health.

**Key words:** *Methods of control, Food safety, Training of food microbiologists.*