

## **SALMONELLA DETECTION METHODS FOR FOOD INDUSTRY**

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*Salmonella enterica* is a serious foodborne pathogen that causes severe and sometimes fatal infections. The greatest risk to public health is posed by raw meat, poultry (chicken, duck, goose) that were not sufficiently cooked, as well as eggs and their products [2]. Salmonellosis is the cause of a high medical and economic burden around the world. Therefore, the development of fast, effective and reliable methods for the detection of *S. enterica* in food continues to be developed, allowing the detection of the pathogen at the earliest stages of production, when it will still be possible to take adequate measures to prevent its further spread, contamination of production equipment and infection of the consumer. The classical microbiological method, the so-called "gold standard", serves as the basis in food testing laboratories. But it is very time consuming and laborious. In modern conditions of the development of the food industry, it would be especially promising to use molecular biological methods, therefore, in this work, a literature review was carried out on the rapid diagnosis of *Salmonella spp.* using PCR-RT, which allows not only to identify the pathogen and its biovars, but also to quantify the degree of product contamination. The method is fast, highly effective, sensitive and specific, which significantly improves the quality of microbiological control in the food industry.

**Keywords:** *Salmonella enterica*, foodborn infections, PCR - RT method

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