## *LISTERIA MONOCYTOGENES* — MICROBIOLOGICAL CRITERIA INDICATE THE ACCEPTABILITY OF SAFETY MEAT RAWS

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The aim of research was development indices of improved horizontal method of *Listeria mono-cytogenes* detection in meat raws (beef, pork, mutton and meat of goat).

The basis of the horizontal method for the *Listeria monocytogenes* detection in meat raws (beef, pork, mutton and meat of goat) is developing the strategies for improving the horizontal method of *Listeria monocytogenes* determination in meat by using the research suspension.

The meat raws are irreplaceable in human diet and their consumption affects the health on the population. In the countries of the European Community, considerable attention is paid to the improvement of the legislative framework for controlling the traceability of meat raws material throughout the entire food chain — from field to table.

The developing the for improving the horizontal method of *Listeria monocytogenes* detection in meat with the help of research suspension, prepared in the ratio of 1:5 (samples of meat in the amount of 10–11 g and 50–55 cm<sup>3</sup> of initial selective enriched medium (half of Fraser broth), and further incubation of the suspension for 21–23 hours at temperature of  $31\pm1$  °C and secondary enrichment. After the first initial enrichment the received culture in the amount of 0.05–0.06 cm<sup>3</sup> is transferred in to the test tube that contains 5–6 cm<sup>3</sup> of second time enriched medium (Fraser broth). Then the environment with crops is incubated for 46–48 hours at temperature of 37 °C. After that the primary (5–6 cm<sup>3</sup>) and the secondary (2.5–3.0 cm<sup>3</sup>) enriched culture in terms of selective environment PALKAM-agaris in oculated and carried out to get clearly separated colonies of *Listeria monocytogenes* for 24±2 hours at temperature of  $37\pm1$  °C.

The results of our research showed that *Listeria monocytogenes* colonies were found in for 24±2 hours at temperature of  $37\pm1$  °C. They were of small size about 1.5–2.0 mm in diameter of greygreen or olive-green color, sometimes with a black halo. In 46±2 hours at temperature of  $37\pm1$  °C they were of green color with deeply sunk centre and black halo in the following samples of in meat raw: 2 samples of beef and 3 samples of pork in at production in processing enterprises; 3 samples of pork, and 2 samples of mutton and 1 samples in meat of goat on agro-food markets.

The improved horizontal method of *Listeria monocytogenes* detection in meat raw have a reliability of 99.8 %. A method we propose is a qualitative technique of improving the horizontal method of *Listeria monocytogenes* detection in meat raw (beef, pork, mutton and meat of goat) along with other methods of determining meat raw safety.

Keywords: MEAT RAWS, LISTERIA MONOCYTOGENES, SAFETY