

**USING THE PEARSON CORRELATION BETWEEN PH, TDS AND ORP PARAMETERS WITH MALON DIALDEHYDE AS THE BIOCHEMICAL INDICATOR OF THE PORK QUALITY**

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The aim of the paper is to compare the trend of quality indicators in pork meat traceability by defining the biochemical mechanism of lipid oxidation. In the pork samples holded at three temperature levels (low - 3°C, medium - 15°C and high - 30°C) over a period of 96 hours, the measurements were performed using UV-VIS spectroscopy for the chromogen concentration (at  $\lambda = 532$  nm) that is obtained as the result in the biochemical reaction with the thiobarbituric acid (TBA). At the same time physico-chemical parameters of the acidity pH, the conductivity TDS and the oxidation-reduction potential ORP were evaluated in these samples to calculate the Pearson correlation as a fundamental criterion in arguing the malondialdehyde as a marker of quality in the biochemical mechanism of pork alteration. The comparative analysis of the trend in the evolution of the used indicators represents the methodological support for the implementation of the new high-performance technologies in the food safety of meat products.

**Keywords:** pork meat, malondialdehyde, thiobarbituric acid, acidity, conductivity, oxidation-reduction potential