



INFLUENCE OF LEAN MEAT PROPORTION ON THE CHEMICAL COMPOSITION OF PORK

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THE AIM OF THE STUDY

The objective of this work was to verify the influence of lean meat proportion on the chemical composition of loin and ham of pork.



MATERIAL AND METHODS

A total of 116 finishing hybrid pigs commonly used in the Czech Republic were fattened for this purpose. The pigs were divided according to the lean meat proportion criterion into 3 groups, resp. more than 60.0%, 55.0 - 59.9% and 50.0 - 54.9%. Representative muscle samples were taken from the right halves of these pigs. They were then homogenized and submitted to chemical analysis.



RESULTS

The results of the measuring showed that the values of water content, total fat (TF), crude proteins and ash matter ranged at the loin at intervals of 72.50 - 72.80%, 1.56 - 1.96%, 23.20 - 23.40% and 1.37 - 1.40% and at the ham in intervals of 70.43 - 71.59%, 3.52 - 4.26%, 21.67 - 21.95% and 1.42 - 1.56%, respectively. In the carcass part of the *musculus longissimus lumborum et thoracis* (MLLT) it was demonstrated that the higher lean meat share, the lower the content of amino acids - threonine, isoleucine, lysine, aspartic acid, serine and proline. In the carcass portion of the *musculus semimembranosus* (MS) the values of valine, isoleucine, phenylalanine, lysine, serine, proline and glycine increased with an increasing lean meat proportion.

CONCLUSION

Within the framework of statistical evaluation of differences between the groups, the values of TF ($P < 0.01$) in MLLT, water content, TF, ash matter, threonine, valine, phenylalanine, lysine, aspartic acid, serine, glycine and alanine in MS were highly significant ($P < 0.05$; $P < 0.01$ and $P < 0.001$).

Fig. 1: Content of water (%) in MLLT and MS

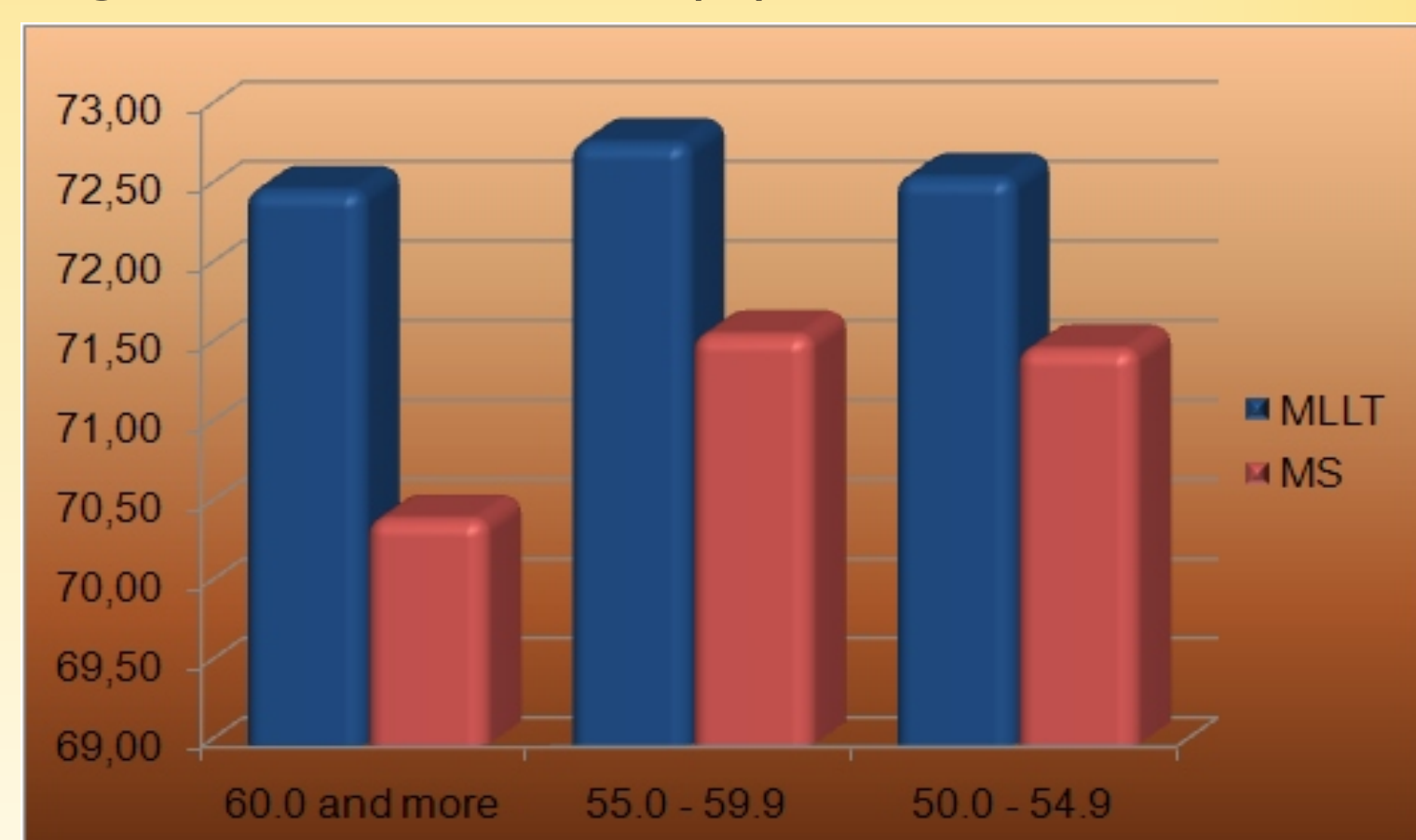


Fig. 2: Content of total fat (%) in MLLT and MS

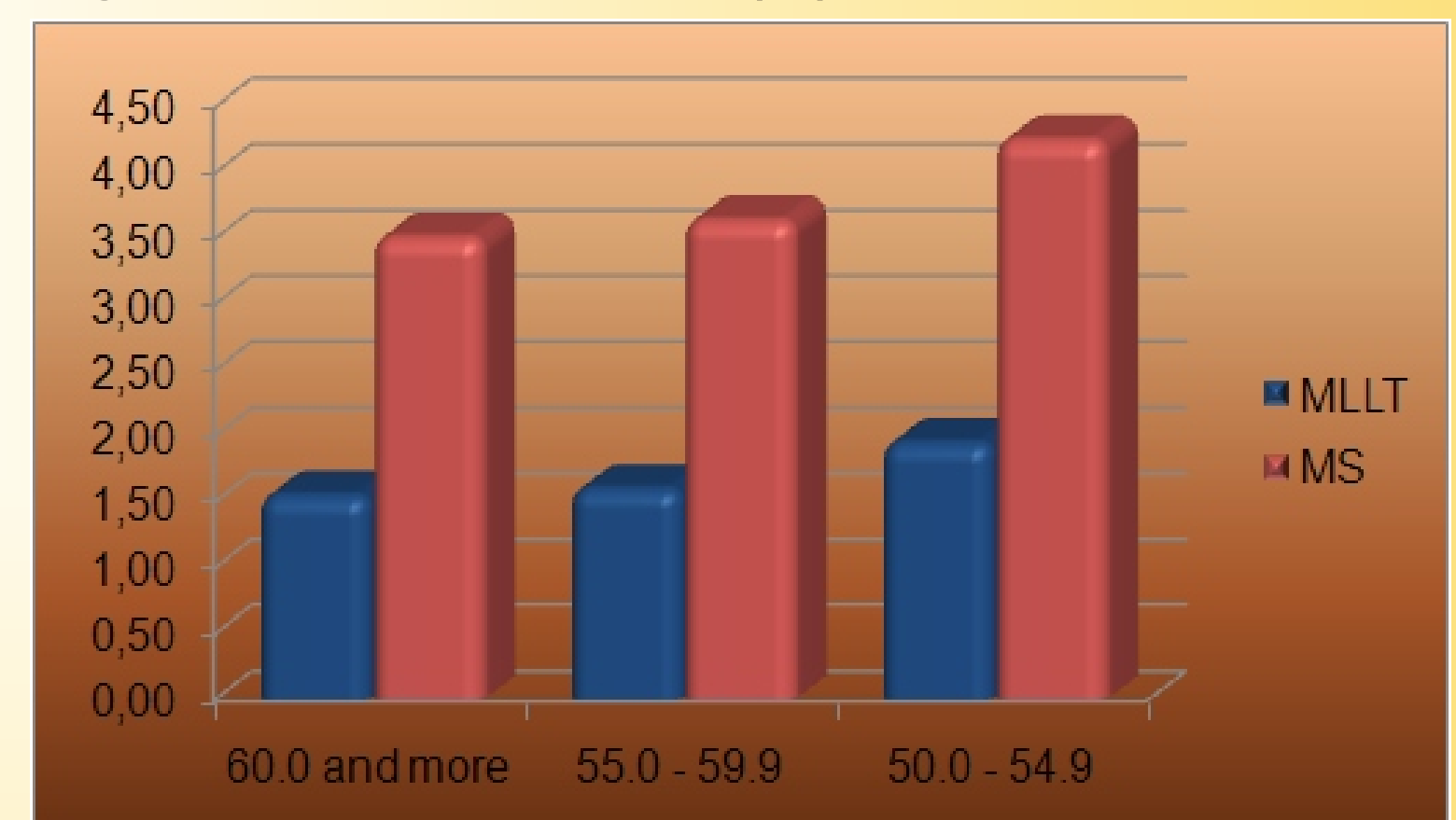


Fig. 3: Content of crude protein (%) in MLLT and MS

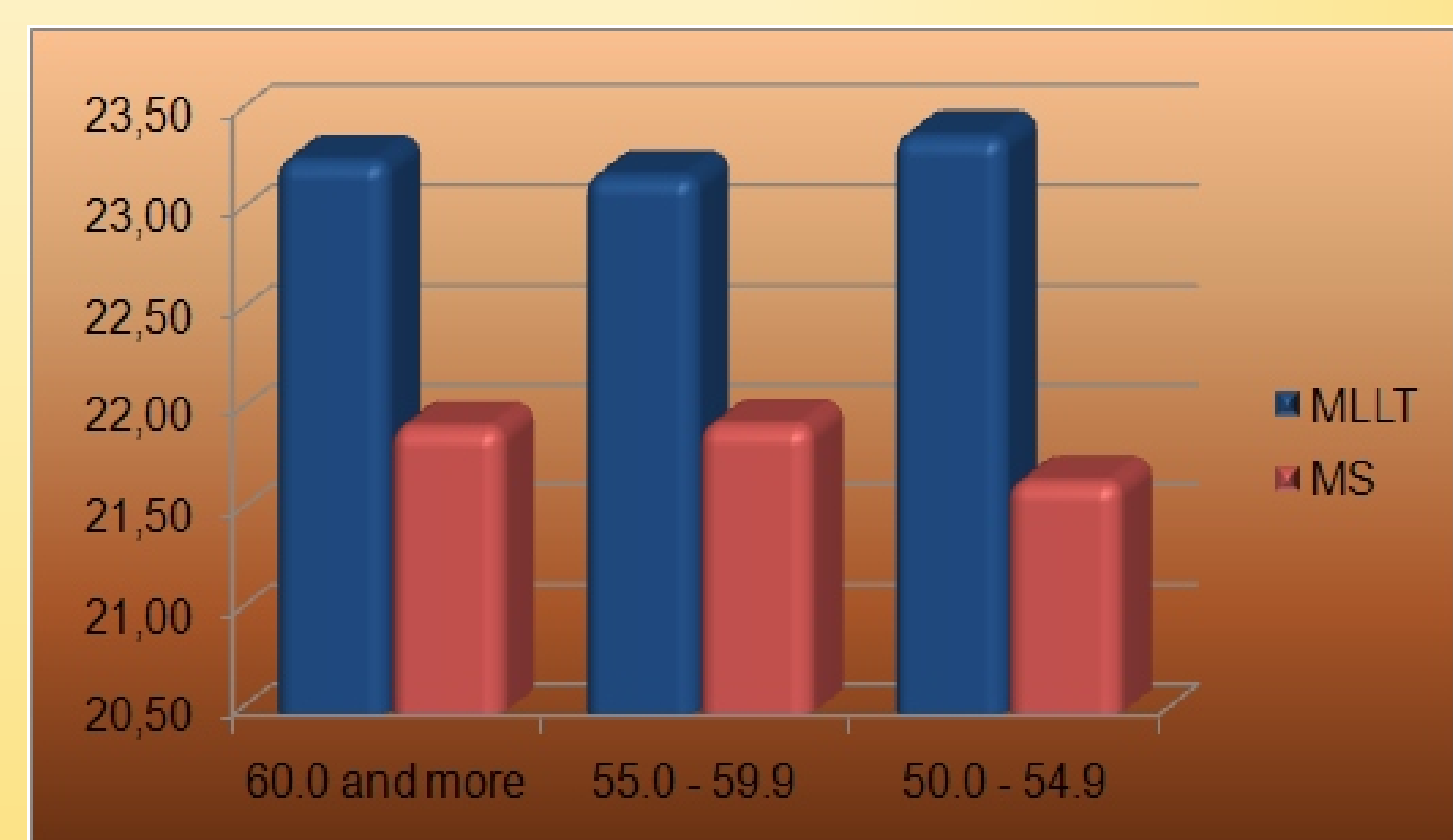
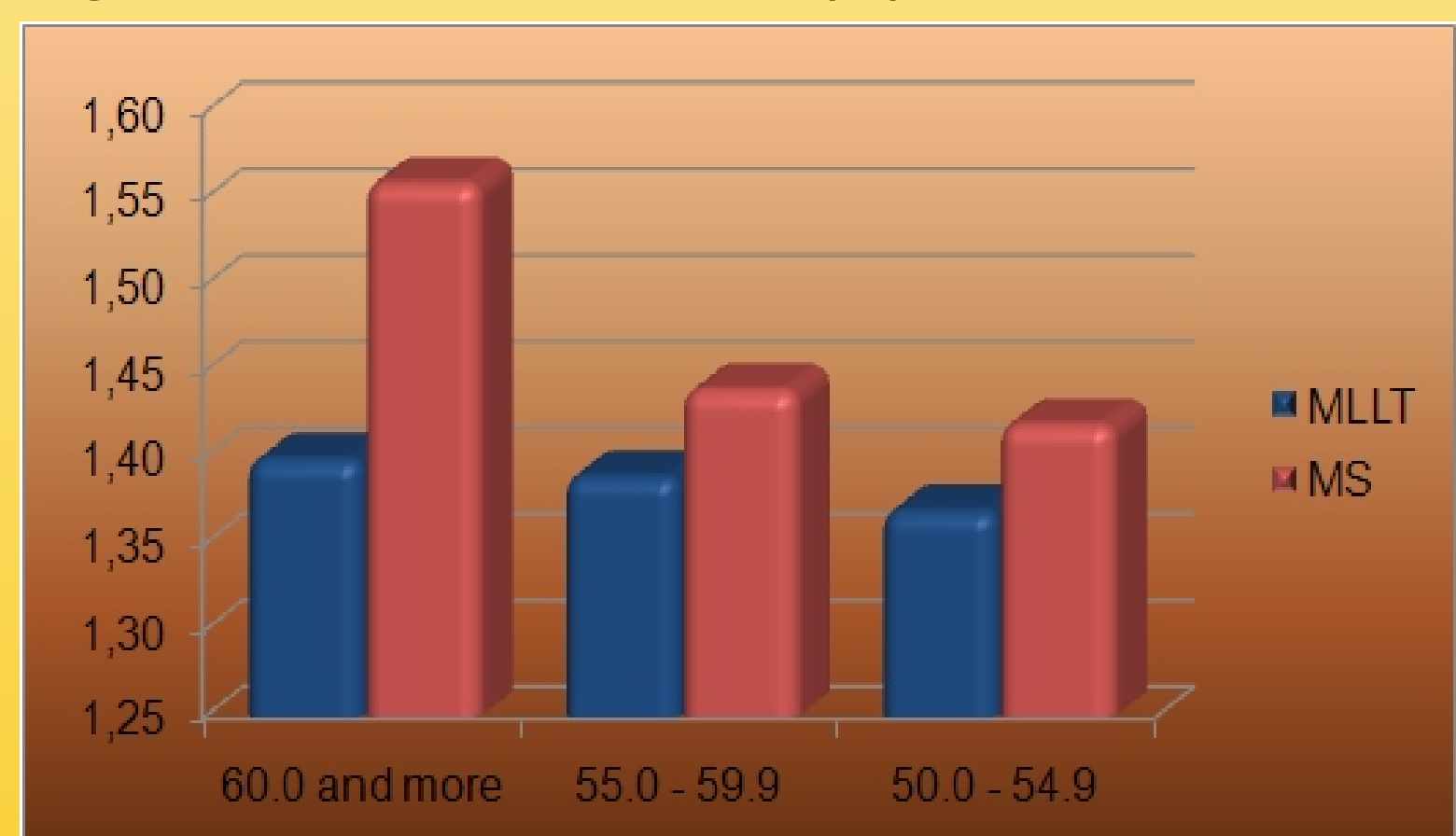


Fig. 4: Content of ash matter (%) in MLLT and MS



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