

# THE INFLUENCE OF THE TYPE OF MAINTENANCE OF MANGALIȚA PIGS ON THE CHEMICAL COMPOSITION OF THE MEAT, THE FATTY ACID PROFILE AND THE CHOLESTEROL CONTENT OF THE MEAT

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## **Abstract**

*For quite some time, the Balkan breed of Mangalita pigs has started again to come to the attention and concerns of breeders in Romania, as well as local consumers of pork, a fact due to the publication of the results of specialized research that highlighted certain particular aspects, of an organoleptic and physico-chemical nature, possessed by the meat and fat of this breed.*

*Through this research protocol, the aim was to investigate the possible influences of the rearing system (in the open - on pasture and in the shelter) and feeding of Mangalița pigs on the chemical composition of the meat, on the profile of fatty acids and its cholesterol content, analyzes carried out at the level of the Longissimus dorsi lumborum muscle.*

*Following the research and observations undertaken, it can be stated that in the meat of pigs raised in the open air, a higher content of protein, crude ash and water and a lower content of total fat were determined, at the level of the analyzed muscle group. From the obtained data it can be deduced that the growing system did not significantly influence the cholesterol content of the meat.*

*Regarding fat composition, a higher proportion of n-3 and n-6 polyunsaturated fatty acids (PUFA) was identified in pasture-raised pigs, while the ratio between them was significantly lower, compared to pigs raised in shelter. The ratio of polyunsaturated fatty acids to saturated fatty acids (PUFA/SFA) was not significantly different between groups, while the ratio of monounsaturated fatty acids to saturated fatty acids (MUFA/SFA) was significantly lower in group of pigs raised on pasture.*

*In conclusion, we can affirm the fact that the breeding systems and the different way of feeding Mangalița pigs determine certain chemical characteristics of the meat, especially by improving the composition of fatty acids and the ratio between them.*

**Key words:** maintenance systems, Mangalița, meat quality, cholesterol