COMPARATIVE CHARACTERIZATION OF FATTY ACID PROFILES IN INTRAMUSCULAR LIPIDS FROM DIFFERENT DOMESTIC AND WILD MONOGASTRIC ANIMAL SPECIES

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Summary. Three monogastric domestic and wild animal species: farmed Lithuanian indigenous wattle pigs (*Sus scrofa domestica*), wild boars (*Sus scrofa*) and beavers (*Castor fiber*) were tested, characterized and, compared by fatty acid composition in intramuscular lipids. Fatty Lithuanian indigenous wattle pigs had lower lipid unsaturation compared to observed wild species. Though the highest number of polyunsaturated fatty acids was identified in the intramuscular fat of wild boars, the muscle lipids of the beavers were characterized by the highest proportions of total polyunsaturated fatty acids (PUFA, 42.12% of total fatty acids) compared to 18.21% in wild boars and 7.36% in Lithuanian indigenous wattle pigs. Pigs and wild boars were found to be comparable in the relationships of the major fatty acids. Wild animals had more favourable polyunsaturated/saturated (PUFA/SFA), n-6/n-3 PUFA ratios and also atherogenic (AI) and thrombogenicity (TI) indexes. PUFA/SFA ratio in the intramuscular lipids from wild boars and beavers were higher and n-6/n-3 PUFA ratio in the beaver was lower than the reference PUFA/SFA and n-6/n-3 PUFA ratios pattern, respectively. Having predominant polyunsaturated fatty acids and favourable PUFA/SFA and n-6/n-3 PUFA ratios, wild game meat, particularly beaver meat could be the n-3 PUFA-rich food in human diets.

Keywords: fatty acids, muscles, pigs, wild boars, beavers.