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Concentration of fatty acids with health-promoting
properties in intramuscular fat of *musculus thoracis*
and *musculus semitendinosus* in young bulls,
as dependent upon breed and diet

S u m m a r y

The study was performed on young bulls of three beef breeds, fed diets based on maize silage or grass silage. The aim of this study was to determine and compare the concentrations of fatty acids in *musculus semitendinosus* (*MS*) and *musculus thoracis* (*MT*), as depending on breed and roughage. A comparison of three beef breeds indicated that Hereford bulls were characterized by the highest CLA concentration and the lowest *n-6/n-3* PUFA ratio, both in *MS* and *MT*. It was found that diet had a significant effect on two fatty acids' content in muscles of young bulls - C14:0 and C18:1. Higher level of these acids was found in *MT* of the bulls fed the maize silage as compared grass silage. Within particular breeds, Charolaise bulls showed a higher concentration of MUFA in both muscles when fed maize silage, and higher proportions of PUFA, PUFA *n-3* and PUFA *n-6* when fed grass silage. As regards the levels of the acids examined in *MS* and *MT*, it was found that *MS* contained more PUFA *n-6* and PUFA *n-3* including C20:5 *n-3*, C22:6 *n-3*, and less SFA including C14:0.