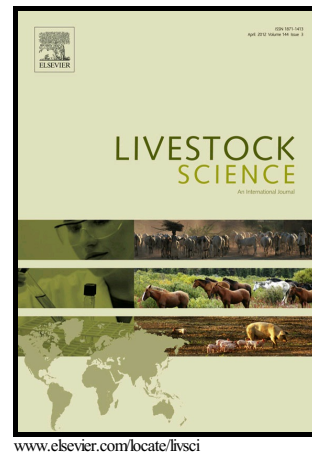


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Changes in cortisol and glucose concentrations in rabbits transported to the slaughterhouse

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ABSTRACT

The effect of transport on Cortisol and Glucose serum concentrations were assessed in rabbits during summer and winter. Animals were divided into high (HSA, 307 cm²/rabbit), medium (MSA, 373 cm²/rabbit) and low space allowance (LSA, 475 cm²/rabbit) transport groups, and rabbits slaughtered directly in the farm were used as control group (C). During summer, cortisol and glucose concentrations were significantly higher in HSA (high space allowance), MSA and LSA than in C rabbits (P<0.01). LSA cortisol concentrations were significantly lower than MSA and HSA samples and MSA rabbits' glycaemia was significantly higher (P <0.01) compared with HSA animals. During winter, cortisol concentrations in group C were significantly lower than in MSA and HSA groups. Glycaemia in group C was lower than in LSA (P<0.01) and HSA (P<0.02) groups. Cortisol and glucose levels in summer were significantly higher than in winter. Our data clearly show that some stress-related physiological parameters are significantly modified by transport, in particular in the case of overcrowded transport crates.

Keywords: rabbits transport, space allowance, cortisol, glycaemia, animal welfare.

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