

## THE INFLUENCE OF TECHNOLOGICAL PROCESS ON PORK QUALITY

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**Summary.** The aim of our study was to evaluate antemortem and postmortem factors that effect pork quality. The effect of two different stunning methods and bleeding degree on meat biochemical processes (pH values and meat temperature) at a meat inspection slaughtering plant were monitored. Our results showed that poor use of slaughtering techniques results in lower quality carcasses with higher incidence in the stress level, injuries, bruising, insufficient bleeding, and bone fractures. These factors affect pale, soft and exudative meat condition that is a predominant meat quality change and amount 58 % of all examined pig carcasses. Bleeding degree of pig carcasses affects meat pH and temperature change, and has statistically significant influence after 24 hours post-slaughter. Stunning methods and personal qualification have an important effect on the efficiency of stunning, bleeding degree and postmortem metabolic processes that affect pH and temperature of carcasses. The results show that with respect to animal welfare and meat quality as well as practical application there are advantages by stunning pigs in 90% carbon dioxide compared to electric stunning.

**Key words:** pigs, temperature, pH, carcass, stress, carbon dioxide.