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**Effect of Gender on Nutritive Value and Sensory Evaluation of
Bacon of Pigs Slaughtered at 110 Kilogram**

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Abstract

Entire male pigs production is not popular in Thailand because of the long time notion about boar taint. The source of boar taint as fecal-like (skatole) is attributable to the residual tryptophan (BURGOON et al., 1992) and fibre (JENSEN et al., 1992) in the colon. Boar taint accumulates in fatty tissue and the consumers can detect it when cooking (CLAUS et al., 2000). Therefore, boar meat products like bacon made from fatty tissues are a major concern for meat producers. This study investigated the chemical composition and sensory score in relationship to gender of bacon from boars, barrows and gilts fed diets with 0.22–0.56 % tryptophan and 3.6–3.7 % fibre and slaughtered at market weight (110 kg). Twenty-four bacons from crossbred (Large White × Landrace × Seghers) boars, barrows and gilts (8 bacons from each group) were investigated in a completely randomised design experiment.

Protein content was higher in bacon from gilts than from barrows (16.16 vs 14.58 %, $p < 0.05$) but not different ($p > 0.05$) from that of the boars (15.70 %). Bacon from boars had lower nitrite content than that of barrows and gilts (1.97 vs 3.09 and 4.16 ppm: $p < 0.05$). No differences were found for phosphate and nitrate contents. Sensory evaluation revealed a higher preference score for bacons from barrows and gilts than from boars. The overall acceptability of bacon from gilts was greater compared to barrows (3.75 vs. 3.52; $p < 0.05$) but not different ($p > 0.05$) from that of boars (3.56). Bacon from gilts had better flavour than that of boar (3.76 vs 3.51; $p < 0.05$) but not different ($p > 0.05$) from that of barrows (3.59).