

# SWINE BREED INFLUENCE ON PORK PROXIMATE COMPOSITION AND ENERGETIC VALUE

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## **Abstract**

*In order to test whether swine breed influences pork proximal composition and other nutritional traits, such as collagen, cholesterol and gross energy content, 60 carcasses from Duroc and Landrace pigs were sampled from loin and ham cut regions (15 males and 15 females from each breed). Samples were subsequently introduced to proximate analysis, using conventional AOAC protocols, enzymatic assay for cholesterol content and NIR Spectroscopy for collagen content then the data were submitted to multiple comparison analysing to test the differences between influential factors (breed, gender and cut part) on the reasoning criteria. Breed significantly influenced the total lipids content, as well as the gross energy content ( $P < 0.05$ ). In all situation, Duroc samples were richer in lipids, cholesterol and energy, compared to Landrace and the same rule applied for females vs. males and for ham vs. loin comparisons. Therefore, swine breed, gender and carcass cut are factors interfering with pork chemical composition and with certain nutritional and dietetic traits, when the animals are raised within the same farm and benefit of the same rearing and nutrition conditions.*

**Key words:** *swine breed, loin, ham, proximate composition, gross energy, cholesterol*