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DETERMINATION OF THE CONTENT OF COENZYMES Q₉ AND Q₁₀ IN PORK MEAT FROM DIFFERENT BREEDS**Sónia C. Andrade¹, Raquel P. F. Guiné^{1,2}, Luísa C. P. Roseiro³**¹ Department Indústrias Alimentares – Escola Superior Agrária de Viseu, Viseu, Portugal² CI&DETS – Instituto Politécnico de Viseu, Viseu, Portugal³ Instituto Nacional de Investigação Agrária e Veterinária, Lisboa, Portugal

Meat contains basic and essential nutrients to humans, and recently has been given a special attention to the presence of bioactive compounds.

The objective of this work was the simultaneous determination of coenzymes Q₉ and Q₁₀ in pork meat, using HPLC. For this study were used 122 samples from different muscles and different breeds of pork meat. Besides, it was also evaluated the influence of animal breed and muscle type in the contents of CoQ₉ and CoQ₁₀.

The results showed that the breed influenced significantly the mean content of CoQ₉ (0.70 mg 100 g⁻¹) and CoQ₁₀ (3.76 mg 100 g⁻¹) ($P < 0.0001$), being this significantly higher in the meat from the breed Alentejano when compared to the other breeds (Large White and Landrace). The type of muscle was also responsible for the variation in the levels of coenzymes in the samples analysed ($P < 0.05$) and ($P < 0.0001$) respectively.

From the results obtained it was concluded that the breed Alentejano presented the highest contents in both coenzymes (CoQ₉ and CoQ₁₀) and that, among the muscles evaluated, the muscle *Semimembranosus* (*Sm*) showed higher concentrations of CoQ₁₀.

Keywords: chromatographic analysis, coenzyme Q₉, coenzyme Q₁₀, pork meat.

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