soned products show high quality characteristics (dry cured ham, salami, *culatello*). In Garfagnana district the breeders often integrate rations of pigs using some local by-products obtained from cereals (spelt meal, spelt bran) and chestnut (chestnut meal), in order to reduce nutritional costs. Numerous studies show as Italian autochthonous breeds are suitable to be grown outdoors or with integration of by-products (*Nero Siciliano, Cinta Senese*). Aim of the study was to evaluate the characteristics of typical salami obtained from *Nero di Parma* pigs. Experimental study was developed with ten castred males fed with conventional (CN) and by-products (BP) diet. Average weight at slaughter was 149.8 kg CN *vs* 127.6 kg BP group, dressing was 84.8% CN diet *vs* 84.1% BP diet. At sectioning lean and fat cuts were separated; leg trimmings (75%) and belly (25%) were used for preparation of single mixture for each pig, salt and spices (3%) were added moreover. Traditional salami (TS), after a ripening period (60 days), were obtained at the following conditions: 18°C, 80% RH. On the TS samples proximate chemical composition were carried out according to AOAC methods: dry matter, crude protein, non protein nitrogen, ash and total lipids. Data were analyzed by one-way analysis of variance; t-test was used for statistical significance comparisons between means. Samples of TS were evaluated for technological parameters as reported: fresh weight 0.48 kg CN diet *vs* 0.32 kg BP diet; fresh length 20.75 cm CN diet *vs* 19.43 cm BP diet; weight loss at 60 days 35.19% CN diet *vs* 32.17% BP diet.

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Casertana × Italian Duroc pig: fatty acid profile of subcutaneous adipose tissue (lard)

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Fatty acid (FA) profile of lipids in animal origin products (AOP) plays an important role for its effects on consumer health. Numerous studies showed that FA composition is affected by epigenetic factors. The aim of this study is to estimate the effect of rearing system and sex on fatty acid composition of subcutaneous adipose tissue of *Casertana* × Italian Duroc pig. Pigs were slaughtered at the age of 15 months and at net live weight of about 175 kg. Fresh lard samples were taken, after slaughtering, in correspondence of the fourth up to the sixth lumbar vertebra from 16 pigs (8 females and 8 castrated males), 8 reared at half-wild (HW) system and 8 reared at confined (C) system. At slaughter, lard thickness was, on average, 3.3 cm and 3.2 cm for HW and C systems respectively and 3.4 cm in castrated males and 3.5 cm in females. Lipids were extracted by Folch method and FA fraction was analyzed by gas-chromatography. The acidic fraction considered consisted of: lauric, myristic, myristoleic, palmitic, palmitoleic, margaric, stearic, elaidic, oleic, C18:1 cis12, linoleic, arachidic, γ-linolenic, α-linolenic, eicosenoic, dihomo-gamma-linolenic acid, eicosedienoic, erucic, eicosatrienoic n-3. The results showed that: (i) sex does not affect FA composition of lard; (ii) rearing system influences the content of the margaric ($P<0.05$), arachidic ($P<0.05$) and linoleic acids ($P<0.05$); in particular, margaric acid content is 0.28% and 0.23% in C and HW rearing systems respectively; arachidic acid content is higher in C system (0.17%) in comparison with HW system (0.15%), while, linoleic acid is, on average, higher in pigs reared at HW system (18.39%) than those reared at C system (16.71%); (iii) the interaction between the sex and rearing system does not exert a statistically significant effect. Overall, the results show that the rearing system would affect only the margaric, arachidic and linoleic acids and not all fatty acid profile of subcutaneous adipose tissue.

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Effects of Curcuma longa ethanol extract on physical properties and oxidative stability of rabbit patties

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Curcuma longa (CL) is a perennial plant that belongs to the Zingiberaceae family; the main components of this spice are curcuminoids, considered the major responsible for the biological activities of the spice. These compounds show a wide range of important properties as a strong antioxidant capacity. Curcumin is the most abundant, the most active and the most studied curcuminoid. Lipid oxidation is one of the main factor limiting the quality and the shelf-life of meat and meat products. Nowadays the acceptance of the synthetic preservatives is decreasing and the consumer demand is increasingly turned to natural products. The aim of this study was to assess the effect of the employment of CL ethanol extract in rabbit raw minced meat samples, during storage at 4°C over a period of 13 days. At 2, 6, 8 and 13 days of storage physical properties (color and pH) and Thiobarbituric Acid Reactive Substances (TBARS) production, in order to evaluate lipid oxidation entity, were evaluated. Meat samples treated with CL extract were compared with control samples and positive control samples (treated with ascorbic acid). CL extract reduced the formation of TBARS in comparison to control samples at all experimental times considered , demonstrating the capacity of this spice to limit lipid oxidation process in meat products and therefore to improve its shelf-life. CL extract is able to affect color properties; lightness (L*) and redness (a*) indexes significantly decreased, while yellowness (b*) increased, compared to control meat sample. pH value increased in meat treated with CL extract after 13 days of storage. CL extract reduced the formation of TBARS in comparison to control samples at all experimental times considered, demonstrating the capacity of this spice to limit lipid oxidation process in meat products and therefore to improve its shelf-life.