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The consumption of rabbit meat, commonly sold as whole carcass or at least as cut-up parts, is nowadays decreasing. Ready-to-eat products, like burgers, represent an important percentage of food production and they are sold as only meat or meat mixed with other ingredients, mainly spices and salt. In order to increase rabbit products relatability in the last year, few research studies were conducted on burgers manufacturing and on antioxidant compounds. One of the most used spices worldwide and very commonly used in rabbit culinary recipes is garlic. Salt, due to its antimicrobial properties could preserve meat products and also it could influence the activity of some enzymes responsible for flavour development. The objective of this research was to evaluate the influence of garlic powder and salt in rabbit burgers during a storage period of 7 days at 4 °C. Thus, meat quality, lipid oxidation and antioxidant capacity and fatty acids profile were determined on raw and cooked samples.

Four different formulations were produced: control (only meat), meat added with garlic powder (0.2%), meat added with salt (1%), and meat added with both garlic powder (0.2%) and salt (1%). Meat was mixed with the assigned ingredient and a total of 120 burgers of 100 g were formatted.

Burgers were statistically tested via two-way ANOVAs with formulation and storage time as main factors with Tukey's test as post hoc ( $p < .05$ ). Garlic powder modified partially the colour (mainly  $b^*$ ) of the burgers and increased partially the antioxidant capacity (DPPH) of the raw samples during time ( $p < .05$ ). Addition of salt modified the colour (mainly  $a^*$ ) and induced an increase in lipid peroxidation (TBARS) in raw burgers ( $p < .001$ ). Moreover, further differences were highlighted in lipid peroxidation of cooked burgers in relation to the formulation and the storage time ( $p < .001$ ). The burgers with both garlic powder and salt showed miscellaneous results. Mixing garlic powder and salt could be a potential practical application as the results partially showed that garlic could contrast the negative effects of the salt.

## O110

### Dietary effect of dried bay (*Laurus nobilis*) meal on rabbit meat quality

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*Laurus nobilis* (commonly called laurel or bay leaves) is known in the human field especially as food spice, rich in polar compounds such as phenols, flavonols and flavones having antioxidant and antimicrobial effects. The aim of this study was to evaluate the effect of dietary supplementation with dried bay leaves in growing rabbits on chemical composition and fatty acid profile of meat. The experiment lasted 56 days and was performed on 120 rabbits; at weaning ( $35 \pm 2$  days of age), the animals were divided into 4 groups (n. 30 per group) based on different dietary treatments. All rabbits were fed a basal diet. The experimental groups were: a negative control (CON) that received the basal diet without supplementation with dried bay leaves; a positive control group (CF) that received a 2.5% fat-enriched diet (pig fat in addition to the 2.6% of crude fat in basal diet); a supplemented group (SB) that received 1 g/kg feed of dried bay leaves meal; a combine-supplemented group (SBF) that received fat-enriched diet and dried bay leaves in the same doses used in CF and SB group. The dietary supplementation with dried bay leaves (SB and SBF) did not affect the gross (moisture, crude protein, ether extract, ash) composition, the pH value, the content in fat-soluble A and E vitamins and lipid oxidative stability of meat, whereas it reduced ( $p < .05$ ) the cholesterol content in comparison with the positive control (CF). Concerning the fatty acid profile of meat, saturated fatty acids content decreased ( $p < .001$ ) in the bay leaves groups SBF and SB compared to CON and CF groups; monounsaturated fatty acids were improved ( $p < .001$ ) in SBF and SB groups compared to CF group, whereas polyunsaturated fatty acids were markedly higher ( $p < .001$ ) in the experimental SB group compared to CON, CF and SBF groups. In conclusion, the dietary supplementation of dried bay leaves improved the lipid profile, particularly in the contents of cholesterol, and monounsaturated and polyunsaturated fatty acids, without affecting the chemical traits and oxidative markers of rabbit meat.

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## O111

### Evaluation of *Pectoralis minor* gaping defect in broiler chickens

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