

Influence of Raising Method and Dietary Olive Cake Supplementation on the Physicochemical Composition of Bísaro Pork Loins: A Comparative Analysis

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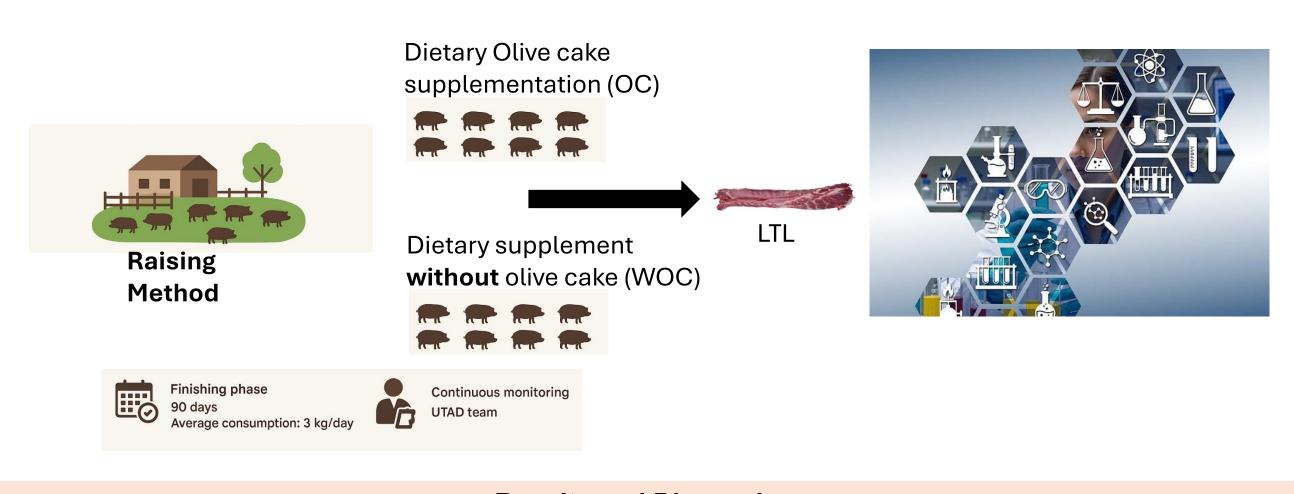
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Introduction

Olive oil production is an important agricultural activity in the European Union, especially in countries such as Spain, Italy, Greece, and Portugal, generating by-products that can be used in animal feed. In pig farming, both intensive systems, focused on high productivity, and extensive systems, which prioritize animal welfare and product quality, coexist. The consumption of meat from extensive systems is increasing due to the perception of greater naturalness, sustainability, and food safety.

Materials and Methods



Results and Discussion

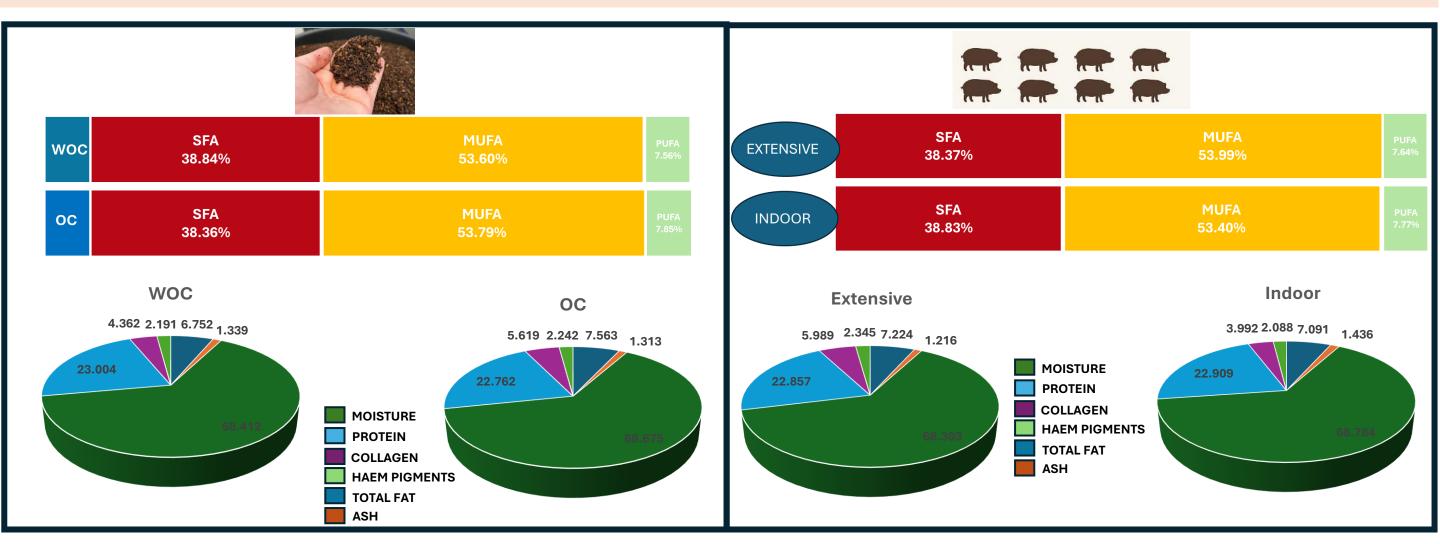


Figure 1: Fatty acid fractions and chemical composition of the Longissimus thoracis et lumborum (LTL) muscle according to production system and diet (with and without olive cake)

Conclusions

The inclusion of olive cake in the finishing diet of Bisaro pig did not significantly affect the fatty acid profile of the Longissimus thoracis et lumborum (LTL) muscle. Similarly, the production system (extensive vs indoor) had no significant influence on the proportions of the main fatty acid groups – SFA (saturated fatty acids), MUFA (monounsaturated fatty acids), and PUFA (polyunsaturated fatty acids). Regarding the chemical composition, neither the olive cake diet nor the production system affected the parameters of total fat, moisture, collagen, haem pigments or protein content. However, a significant difference was observed in ash content, with the indoor production system showing a higher value compared to the extensive system.

These findings suggest that the use of olive cake as a dietary supplement can be incorporated into Bisaro pig feeding strategies without compromissing meat lipid quality, potentially contribuing to more sustainable animal production systems.







