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Abstract book

Accepted Posters

Artificial intelligence in the context of sensory quality assurance of PDO products as iberian ham

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Aim:

Industry 4.0 applications to the food industry has as one of its pillars the application of Artificial Intelligence (AI) in those aspects of food manufacturing that are related to consumers' perception of the products, thus obtaining valuable information to be able to act accordingly. Here, the sensory characteristics of food play a transcendental role for consumer acceptance, particularly for . To date, the only possible way to verify the sensory quality of the products guarantee by a quality label is to performe a evaluation with a trained sensory panel. To solve this problem, AI into the field of Food Sensing is enable to reproduce the human perception, even improve the results of a trained sensory panel in terms of objectivity and regularity.

The aim of this work is to use networks to estimate the true numerical values of sensory attributes in samples of iberian ham .

Method:

This work has been caried out using Artificial Neural Networks (ANN) as a tool for the modeling and subsequent execution of this perceptive activity. To this purpose, data from physicochemical characteristics measured instrumentally and data of sensory parameters obtained by a trained sensory panel from PDO Guijuelo iberian ham, were used.

Results:

This work presents the results used to validate the technological proposal. For each of the sensory parameters, a neural network is proposed whose output estimates the value of each of the parameters of the quantitative descriptive analysis.

Conclusion:

The machine-learning methods can provide a reliable methodology for sensory quality control in a product such as Iberian ham.

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Certificate of Contribution

We hereby confirm that

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For and on behalf of EFFoST