

The informativeness of the features, the choice of methods for reducing the volume of data and ways of classification and regression, depend largely on the product under study and its characteristics.

4. Conclusion

The obtained results demonstrate that the algorithms used for analysis of food and agricultural products, their spectral and dielectric characteristics, allow the development of adequate classification models for rapid and non-destructive determination of the main indicators of quality of these products in the specified measurement conditions.

The joint use of data from several sensors leads to a comprehensive assessment and more accurate division of the characteristics of the studied products, depending on their condition.

The obtained results show that the classification methods and the predictive models manage to keep the values of the classification error low.

These facts have the prospect of direct application of different types of data from visual images, spectral, ultrasonic and dielectric characteristics, in combination with the selected classifiers and prediction models, in the systems for quality assessment of food and agricultural products.

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