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DETERMINATION OF PROXIMATE COMPOSITION FOR SOME DARK CHOCOLATE TYPES

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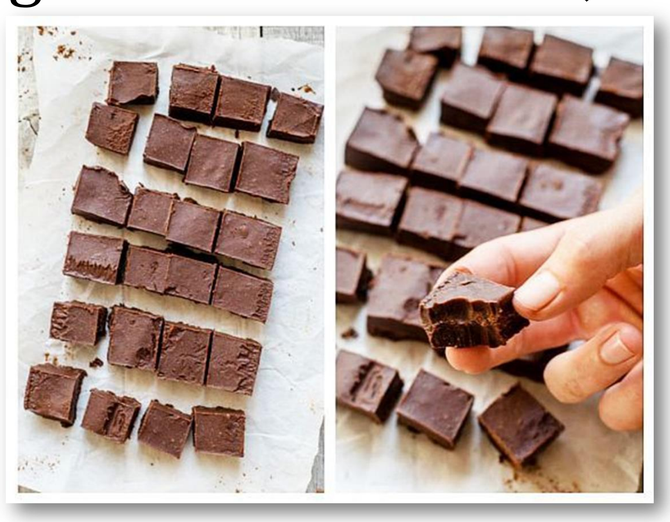
Abstract:*The purpose of this paper is to determine the proximate composition of some types of dark chocolate with different cocoa mass contents (between 60 - 85%). Carbohydrates, proteins, fats, minerals and moisture concentration were determined from samples represented by three brands of imported dark chocolate with 60-85% dry cocoa mass, commercialized in hypermarkets of Timisoara. The obtained results show that the analyzed chocolate samples contain important quantities of nutrients, depending on the type of chocolate and analyzed nutritional parameter: 1.24 - 1.36 % moisture; 1.58- 2.11 % minerals; 40.12 – 45.81 % fats; 6.31 - 11.33 % protein and 20.45 – 43.52 % carbohydrates.*

• Introduction

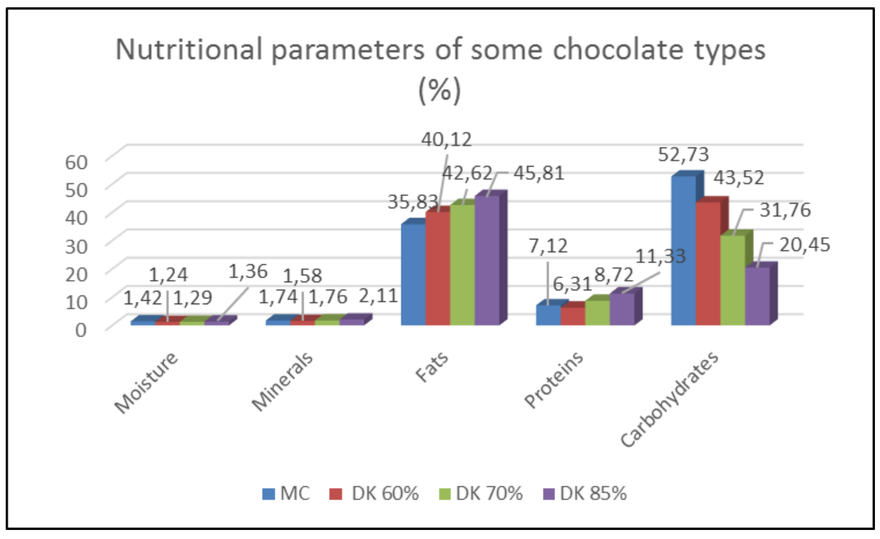
This paper aims to determine some nutritional parameters (moisture, minerals, fat, proteins, and carbohydrates) of imported chocolates marketed in Timisoara (Romania). The samples were represented by some dark chocolates (with 70-85% cocoa mass) and milk chocolate.

• Material and method

- Cocoa, cocoa butter, vegetable fats, powdered milk , sugar, lecithin, flavors.
- humidity -drying in an oven at 105 to 105 ± 2 °C to constant weight;
- Ash-gravimetric method, by calcination at 550 °C for 4 hours to constant weight;
- Proteins-Kjeldahl method;
- Total fats-the Soxhlet method, using hexane as solvent;



• Results and discussions



• Conclusions

- The types of dark chocolate with contents of 60, 70 and 85% cocoa mass has important contents of nutritional factors,which differs depending on the percentage of cocoa mass.
- Comparing the values of the nutritional factors of dark chocolates with milk chocolate, it can be said that dark chocolates have substantially lower carbohydrate and higher fat contents.
- The levels of proteins and minerals in dark chocolate with 70% and 85% mass of cocoa are above the levels of proteins and minerals from milk chocolate.