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SENSORY PROPERTIES OF DARK CHOCOLATES WITH DIFFERENT COCOA PARTS CONTENT

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Sensory properties - appearance (color, gloss, form, surface), texture (structure, snap, hardness, chewiness and melting properties) and aroma (odor and taste) of dark chocolate containing 60, 70, 75, 85 and 99% of cocoa parts, were assessed by experienced panelists (n=20) according to current relevant ISO standards (ISO 6658:1985, ISO 8586-1:1993, ISO 8586-2:1994). Based on the obtained results, chocolate samples with 70% of cocoa parts, with distinctive color, corresponding textural properties - good melting behavior in the mouth and inherent bitterness, were evaluated with highest score for all sensory properties (X_m= 4.90 or 97.99% of the maximum quality). Dark chocolate samples with 85% (X_m=4.89 or 97.86% of the maximum quality), with 60% (X_m= 4.88 or 97.67%), and 75% of cocoa parts (X_m=4.59 or 91.74%) were assigned with similar number of scores, corresponding to the category of excellent quality. LSD test results showed that the evaluated samples of dark chocolate with 60, 70, 75 and 85% of cocoa parts, did not differ significantly (p □ 0.05) in terms of sensory properties. Dark chocolates with 99% cocoa parts won somewhat lower number of scores (X_m = 3.75 or 74.81% of the maximum quality), classifying them in a very good quality category, significantly different (p □ 0,001) in comparison to the other samples. General conclusion would be that sensory quality of dark chocolate with different proportions of cocoa parts is very good, ie. excellent, and due to the high flavonoids content they may have beneficial effect on human health, primarily on the cardiovascular system functioning.

Keywords: dark chocolates, cocoa parts, sensory properties

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