

**EMOTIONS, ELICITED BY CARBOHYDRATES CONTAINING FOOD**

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Food and emotions are closely related and food-evoked emotions can give a better understanding of food choice and have a positive influence in human health. A single food product may elicit various emotions and take a significant part in food consumption and mood improvement.

The aim of this work was to test which emotions of users can be captured from facial expressions elicited directly by the actual tasting of different food products (bread and chocolate), using Noldus FaceReader technology and to examine whether carbohydrate type containing food have influence on positive mood. Five various types of bread (wheat, corn, rye, whole grain bread and various grain bread) were the objects of investigation as source of polysaccharides. Additionally, milk chocolate was tested as product containing simple sugars. All types of breads as well as chocolate elicited six emotion patterns "Happy", "Sad", "Angry", "Surprised", "Scared" and "Disgusted" however in different intensity. Higher values of facial expressions "Sad", "Angry" and "Disgusted" intensities were detected for bread samples ( $0.201$ ,  $0.046$ ,  $0.004$ , respectively) in comparison with chocolate. There were no significant differences in facial expressions between various bread types and chocolate. Positive facial expression "Happy" value, elicited by chocolate, had the highest value ( $0.146$ ) between all samples, while emotion "Disgusted" showed only traces ( $<0.001$ ).

Results showed that chocolate can elicit more positive emotions, while bread, containing high level of carbohydrates, induces less positive emotions and this could be related with type of carbohydrates as well as alkaloids presented in chocolate. Previous compounds, found in chocolate, can accelerate tryptophan uptake, which modulates mood.