

MATHEMATICAL ANALYSIS OF THE COLOUR PARAMETERS OF PASTA AND
SEMOLINA MADE FROM DURUM WHEAT

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Abstract

Recent time there is a growing interest in pasta made from durum semolina, because these pastas don't contain egg. Therefore the colour characteristics of the semolina are dominant in the visual colour of products. The colour changes of dry pastas made of different semolina during storage was investigated. The relationship between the β -carotene content and colour characteristics of semolina was evaluated too. The pastas were made from seven types durum semolina. The six months storage experiment was carried out two different ways: in natural light, and in dark. The CIELab colour characteristics of dry pastas were measured twice a month using Minolta CR colorimeter. During six month the colour of pasta products didn't change significantly in the light-protected storage condition. In the case of natural light exposed samples, colour parameters indicated that the pastas became darker and less yellow since the 56th day of storage. Significant linear relationship was established between the β -carotene content and b^* yellowness coordinate of semolina.