

COMPARATIVE ANALYSIS OF COLOUR AND SENSORY PARAMETERS OF KONZUM BISCUITS MADE FROM HIGH FIBER FLOUR USING SWEETENER

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ABSTRACT

We investigated that how change the surface color and sensory parameters of „konzum” biscuits if they were made using high fiber flour and sweetener. „Konzum” biscuits were baked using various high-fiber flours and sweeteners. The 5 different types of flour (BL 55, whole wheat flour, graham flour, spelt flour and reduced carbohydrate flour) and 3 different sweeteners (xylitol, erythrite and mixture of cyclamate and saccharin) were used. The CIELab colour characteristics of biscuits surface were measured using Hunter Miniscan colorimeter. The sensory classification was based on texture, taste and smell. In the evaluation, we compared the sensory score and surface color of the biscuits made according to the factory recipe and the biscuits made with different flour and sweeteners. The sensory score of the control biscuit baked according to the factory recipe was the highest, the total score of the biscuits baked with different flours and sweeteners was 2-4 units lower. The best sensory ratings were achieved by biscuits baked with a mixture of cyclamate and saccharin, including those made from graham flour or whole wheat flour. Biscuits baked with xylitol received the worst sensory rating. The color difference value calculated between the color characteristics of the control biscuits and the biscuits made using different flours and sweeteners was the smallest in the case of biscuits baked with a mixture of cyclamate and saccharin. The color difference was 3,32 in the case of graham flour and was less than 3 units perceptible to the eye for other flours.

Keywords: biscuit, sweetener, colour, sensory parameters