INULIN FORTIFIED CHOCOLATE COOKIES

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2010

ABSTRACT

A reduced sweet cookie was developed in this research by incorporation of inulin and the acceptability was tested through sensory evaluation. There were three formulations tested in the research. These formulations included 10 %, 20 % and 30 % of inulin replacement of total sugar content in cookie making. In physical analysis of this product, the moisture content and water activity increased from 10 % to 30 % formulation, respectively. Besides, the spread factor was reduced with the reduction of inulin addition. On the other hand, protein, fat and ash content of formulation, it slightly decreased. From the quantitative descriptive analysis (QDA), the result has shown that the sweetness of the cookie reduced with the decrease of sugar content. Meanwhile, the hardness and roughness of the cookies increased from the low to high inulin content. According to the panelists, the moisture absorption increased from 10 % formulation to 30 % formulation. Tooth packing attribute which had been tested in QDA test did not show a specific trend with different inulin content. Sensory evaluation was tested among 80 panelists. Appearance, aroma, texture, flavour and overall acceptance were tested in the questionnaire. The result collected from these panelists has shown that the most preferred product was 10 % fortified cookies, followed by 30 % formulation and 20 % inulin additional cookie, the least preferred sample was the commercial product. This sequence was applied to five attributes that tested in sensory evaluation. Further study can be aimed on inulin acts as fat replacer in baked goods.