

عنوان مقاله:

Improving Rheological and Sensory Properties of Flour and Laboratory Cake Using Different Concentrations of Guar Gum

محل انتشار:

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خلاصه مقاله:

The current study was conducted to show the effect of adding guar gum on improving the rheological and sensory properties of flour and laboratory cakes. Turkish flour of the brand BESLER UN was used, guar gum was added in concentrations of ۰.۵%, ۱% and ۱.۵% in treatments T₁, T₂ and T₃, fourth treatment. T was left without addition to the control group. Chemical composition analysis of the flour was carried out before use, conforming to the Turkish and Iraqi standards for multi-purpose wheat flour. The addition of guar gum did not significantly affect the moisture and ash content, which amounted to ۹.۶% and ۰.۶۴%; values of dry and wet gluten and gluten index were ۸,۱۴, ۲۴.۵ and ۹۱.۴, respectively, having a clear effect on the relatively good extraction rate of flour ۷۲%. Adding guar gum significantly affected the rheological properties of cake dough such as oil absorption and emulsification, reaching ۲.۶۶ and ۲.۲۸, compared with the control by ۲.۵۳ and ۱.۳۵. As for the water absorption of all treatments, there were no significant differences between them and the control, sensory characteristics of the cake, including taste and mouth feel, affected by the increase in the addition of guar gum, from ۶.۸۶ and ۶, ۵۷ respectively in control to ۸.۵۴ and ۸.۵۶ in T₃ treatment (۱.۵% guar gum). The characteristics of color, texture and smell did not show significant differences from the .control when adding guar gum for all treatments

کلمات کلیدی:

Guar Gum, Rheological properties, four, Cake

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