

## عنوان مقاله:

Effects of Grape Seed Powder as a Functional Ingredient on Flour Physicochemical Characteristics and Dough Rheological Properties

## محل انتشار:

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## خلاصه مقاله:

In this study, the effects of incorporating grape seed powder (GSP) on flour physicochemical properties i.e. particle size, crude protein, fiber, wet gluten and gluten quality (Zeleny test), and dough rheological properties were investigated. Increasing incorporation levels of GSP from 5 to 25% (w/w flour basis) led to an increase in the amount of fat, total phenol, and total dietary fiber; whereas total protein, wet gluten, and Zeleny values of the flour blends decreased. The results of farinograph test indicated a reduction in water absorption, stability, and farinograph quality number by increasing the concentration of GSP in the flours. Addition of GSP to wheat flour increased degree of softening and mixing tolerance of dough, while arrival time was slightly affected. Incorporation level below 10% (w/w) showed no negative effect of grape seed on dough rheological performance. There was a good potential in increasing nutritional and health value of bread by incorporating GSP, while keeping attention on the negative effects of the higher concentrations of GSP.

## کلمات کلیدی:

Farinograph, Omega-3 fatty acids, Rheology, Wheat Flour, Zeleny values

## لینک ثابت مقاله در پایگاه سیویلیکا:

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