

## The effect of fortification with defatted soy on the sensory and rheological properties of Taftoon bread

Mashayekh, M.<sup>1\*</sup>, Mahmoodi, M. R.<sup>2</sup>, Entezari, M. H.<sup>3</sup>

1. Instructor, Food Science and Technology Department, School of Nutrition and Food Technology, Shaheed Beheshti University of Medical Sciences. Tehran, IRAN.
2. Instructor (PhD Candidate), Department of Nutrition, School of Health, Kerman University of Medical Sciences. Kerman, IRAN.
3. Assistance Professor, Department of Nutrition, School of Health, Isfahan University of Medical Sciences. Isfahan, IRAN.

The objective of this study was to determine the effects of soy-fortified bread on the sensory and rheological properties. Ground defatted soy flours were blended with wheat flour at 3, 7 and 12%. The organoleptic characteristics of soy-fortified wheat breads were carried out by taste panel. The effect of this fortification on the rheological properties of the resulting dough was investigated using farinograph and extensograph for quality assessment of the final product. The ash and protein contents of 3% and 7% wheat-soy bread blends increased compared with control. The results revealed that organoleptic characteristics scores such as bendability, appearance, flavor and taste, crust texture and overall acceptability properties of bread containing 3% defatted soy flour was highest. Farinograph testing of the control flour and different wheat-soy flour blends showed that water absorption, dough development, dough stability, and valorimeter value increased as the level of fortification increased.

The results of this study confirm the importance of producing 3-5% defatted soy fortified bread with good rheological and sensory characteristics.

**Key words:** Taftoon bread, Fortification, Defatted soy flour, Sensory properties, Rheological characteristics,

---

\*Corresponding author E-mail address; [mortezamashayekh@yahoo.com](mailto:mortezamashayekh@yahoo.com)