

## Effects of Some Legume Flours and Gums on Some Properties of Turkish Noodle

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**Abstract :** In this research, different wheat-legume flour blends were used in Turkish noodle preparation with the aid of some gums (xanthan and guar). Chickpea, common bean and soy flours were used in noodle formulation at 20% level with and without gum (1%) addition. Some physical, chemical and sensory properties of noodles were determined. Water uptake, volume increase and cooking loss values of the noodles changed between 92.03-116.37%, 125.0-187.23% and 4.88-8.10%, respectively. Xanthan or guar gum addition decreased cooking loss values of legume fortified noodles. Both legume flour and gum addition significantly ( $p < 0.05$ ) affected the color values of the noodles. The lowest lightness ( $L^*$ ), redness ( $a^*$ ) and the highest yellowness ( $b^*$ ) values were obtained with soy flour usage in noodle formulation. Protein and ash values of noodles ranged between 15.14 and 21.82%; 1.62 and 2.50%, respectively, and the highest values were obtained with soy flour usage in noodle formulation. As a result of sensory evaluation, noodles containing chickpea flour and guar gum were rated with higher taste, odor, appearance and texture scores compared to other noodle samples.

**Keywords :** noodle, legume, soy, chickpea, common bean, gum

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