

Effect of extrusion on colour characteristics of honey enriched whole grain cereal flour extrudates

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■ **ABSTRACT** : The work presented in this paper aimed at understanding the effects of extrusion processing parameters and level of honey on the colour properties of extrudates prepared from whole wheat flour, brown rice and whole maize flour. Whole grain Cereal flours (wheat, brown rice, maize) singly and in combination (in 3:4:3 proportion) were mixed with varying level of honey and mix was extruded through co-rotating twin screw extruder at different feed moisture and barrel temperatures. The resulting extrudates were evaluated for colour properties by Hunter Lab colorimeter. The results of this study revealed that L* value which represents lightness of extrudates feebly increased on increasing the feed moisture content while increasing the barrel temperature reduced the L* value of extrudates. Increased honey level in the feed also resulted in decreased L* value. It was observed that the a* value of extruded samples increased as a function of extrusion temperature and honey level in the feed. Similar to a* value, an increase in b* value of extrudates was also observed on increasing the extrusion temperature and honey level in the feed. The hue angle of the extrudates decreased on increase in extrusion temperature and honey level in the feed.

■ **KEY WORDS** : Extrusion, Whole grain cereals, Honey, Colour, Feed moisture

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