

# **Effect of Extrusion Variables on Fermented Maize–Finger Millet Blend in the Production Of Uji**

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## **Abstract**

The effects of screw speed, feed moisture, glucose, fructose, sucrose and maltose on extrusion of lactic fermented and dried maize–finger millet blend was investigated. Fermentation caused a reduction in sectional expansion index, flour bulk density and water absorption index (WAI) but increased specific volume, water solubility index and darkened the extrudates. Increase in feed moisture (13–25%) reduced sectional expansion index, specific volume and yellowness but increased extrudate moisture content, bulk density and darkness of the extrudates. Increasing screw speed (158–242 rpm) had a negative correlation only with specific volume and lightness ( $P<0.05$ ). An increase in the content of any of the sugars reduced extrudate moisture content, sectional expansion index, WAI and specific volume but increased bulk density and water solubility index. Extrudates treated with monosaccharides were darker than extrudates treated with disaccharides.

## **Keywords.**

extrusion variables, fermented maize–finger, finger millet blend ,production of *uji*.