

Centro de Desarrollo de Productos Bióticos



EFFECT OF EXTRUSION COOKING ON THE FUNCTIONAL PROPERTIES AND STARCH COMPONENTS OF LENTIL/BANANA BLENDS: RESPONSE SURFACE ANALYSIS.

ABSTRACT

Banana and lentil flour blends were processed in a single screw extruder modifying the flour properties of the blend (20.5-79.5%), at selected range of die temperature (145-175 °C) and the feeding moisture content (20-24%). Functional characteristics evaluated in the extrudates were water absorption index (WAI), water solubility index (WSI), bulk density (BD), paste viscosity properties, microstructure and resistant starch content. The concentration of lentil/banana blends and temperature were the most important variables affecting dependent variables WAI, WSI, BD and viscosity properties. The results of this study indicated that extrusion cooking induced desirable functional characteristics to lentil/banana blends by increasing their resistant starch content.

http://rmig.org/new%20page/Pdfs/Vol.%2010%20No.%203/Alim_1/eAlim_1.html



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Revista Mexica de Ingeniería Química. Volume 10, Issue 3, pages 409-419.