

## EFFECT OF MOISTURE AND CONCENTRATION OF SESAME IN THERMOPLASTIC EXTRUSION OF CORN GRITS

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### **Abstract**

The thermoplastic extrusion technique allows for greater ease in producing mixtures food for human consumption. We tested whether the use of sesame oil and moisture variation in the extrusion process in order to analyze the characteristics of extruded products unexpanded (pellets). The experiments ranged around the central points of moisture (24.93% to 39.07%) and sesame (0.092% to 24.93%) respectively Extrusion caused degradation of the starch pellets with corn grits. A higher cold paste viscosity 100 cP at 26% to 39% moisture and 0% to 13% sesame. It breaks the low viscosity of 50cP (breakdown) of the starch molecule under high moisture (30% to 39%) and sesame content ranging from 0% to 26%. The solubility index in the pellets increased to 6.5% with 12% sesame and decreased to 5.5% with 26% sesame The water absorption rate increased to 6.5 g / gel / g dry-matter of the pellets with 20% to 26% moisture and 22% to 26% sesame. Concludes the moisture and sesame influence the physical characteristics of extruded products unexpanded corn grits.

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