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Effect of extrusion cooking on chemical structure, morphology, crystallinity and thermal properties of sorghum flour extrudates

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Research Highlights

- Effect of extrusion cooking on structure and morphology of sorghum flour extrudates was investigated.
- The greatest formation of starch-lipid complexes were obtained at low value of feed moisture.
- Formation of amylose-lipid complexes influenced starch gelatinization properties.
- Extrusion cooking changed the A-type pattern of native sorghum starch to V-type crystalline.
- The secondary structures of native sorghum flour protein changed from α -helix to random conformation after extrusion cooking.

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