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Fortification of extruded snacks with chitosan: Effects on techno functional and sensory quality

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Highlights

- Functional extruded snack was prepared with different levels of chitosan.
- Effects of physical, chemical and functional qualities were evaluated.
- Increased level of chitosan in functional snacks reduced oxidation.
- Crystallinity index was higher in snacks with higher chitosan level.

Abstract

Chitosan is a dietary fibre that possesses numerous functional, technological and physiological properties useful in improving food quality. Owing to its fat absorbing ability, chitosan is widely consumed as a health supplement in the form of tablets and capsules. With a view to enhance its consumption and availability, the current work was taken up to evaluate techno-functional quality improvement of shrimp based extruded snacks fortified with chitosan. Chitosan powder at 1, 2 and 3% (w/w) level was added to the base material (corn flour and rice flour in the ratio of 70:30 and 15% *Acetes* powder) for extrusion. Addition of chitosan in *acetes* based snacks significantly reduced expansion ratio, porosity and crispiness

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