

## Studies on process development of Aonla (*Emblica officinalis*) residue incorporated bread

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This study investigated the process for incorporation of aonla (*Emblica officinalis*) residue, rich in nutrient contents along with dietary fibre incorporation in to flour for development of bread. Proximate analysis were carried out for the whole aonla, aonla residue, control bread as well as aonla residue incorporated bread. Data showed that aonla residue had high amount of dietary fibre (39.76%) with high proportion of IDF. Bread prepared from incorporation of 3% aonla residue increased the dietary fibre content from 2.31% to 3.43% thus meeting the RDA requirement per 100g. Addition of food grade gluten to the residue incorporated bread had shown better dough development and rise in final bread volume. Thus three types of bread were formulated CB (control bread), RBG (Residue bread with gluten) and RBWG (Residue bread without gluten) and evaluated for chemical composition, physical characteristics. For sensory evaluation two other types of bread WWB (Whole wheat Bread) and MGB (Multi grain bread) were taken from market and compared. Student's t-test for two population result revealed that there is no significance difference in the overall acceptability at  $p < 0.05$  level. Storage studied was carried out for a period of 7 days with evaluation of change in nutrient contents and microbial load during storage. It was observed that there is decrease in total sugar content, protein and total phenolics content, increase in moisture and titrable acidity and no change in pH during storage.

### Biography

G. Nagamaniammai currently pursuing Ph. D (Food Biotechnology) at SRM University, Kattankulathur in the field of Nutraceutical and Functional food product development. She has completed M. Tech (Food Technology and Biochemical Engineering) from Jadavpur University, Kolkata. She published 15 research papers at National and International Journals and Conferences and filed two patents.

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