



NUTRITIONAL AND TECHNOLOGICAL QUALITY OF GLUTEN-FREE BREADS FORMULATED WITH NON-CONVENTIONAL FUNCTIONAL FLOURS/POWDERS/EXTRACTS- A REVIEW

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ABSTRACT

Production of high quality and nutrient-rich gluten-free (GF) bread remains a challenge for food scientists. Incorporation of new functional ingredients is one of the main approaches to improve the acceptability of GF bread by consumers. This review highlights recent studies (2016-to present), adopted to improve the nutritional and technological quality of GF bread with the help of non-conventional functional ingredients, edible insect powder/flour, microalgae and seaweed powders, green mussel, bee pollen, anchovy flour, coffee/cocoa by-products, and leaf powder/extract. The scientific studies reviewed in this paper demonstrated that those non-conventional ingredients provided nutritional and technological functionality to the GF bread in different manners. They acted as coloring, flavoring, antioxidant, texturizing, or anti-staling agents in GF bread formulations. These non-conventional functional ingredients have the potential to produce nutrient-rich GF bakery products with improved quality.
