

# Studies of Nutritional and Phytochemical Profiles of Fermented Sourdough

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## Abstract

*Lactobacillus* sp. isolated from sourdough (collected from local bakery) in whole wheat flour, refined flour and in cow milk curd were analyzed based on the nutritional and phytochemical profiles of sourdough. In antibiotic disk diffusion assay, *Lactobacillus* sp. shows negligible resistance towards streptomycin discs while no resistance was reported in case of chloramphenicol discs. The biochemical parameters show increase in carbohydrate, protein, riboflavin and folic acid contents in sourdough fermented with lactic acid bacteria. Curd made with only lactic acid bacteria isolate shows higher riboflavin content compared to other fermented food samples. Phytochemical profile shows that, the amount of bioactive compounds decreases with fermentation and present in higher amount in newly fermented sourdough with flavonoid and phenolic contents.

**Keywords:** Agar Well Diffusion Method, Antibiotic Sensitivity Test, Fermentation, Lactic Acid Bacteria (LAB), Phytochemicals, Sourdough