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Optimization of antioxidant rich indigenous food product "burfi" recipe using response surface methodology and its storage study

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■ **Abstract :** Efforts were made to prepare the indigenous food product called burfi using underutilized ghee residue and replacing the sucrose with many health and medicinal benefits containing honey. Response Surface Methodology was used to optimize the amounts of ingredients required to prepare a burfi containing minimum amount of free fatty acids (FFA), maximum amount of Antioxidants, phenols and flavonoid contents and overall acceptability by consumer on hedonic scale. The optimized and experimental values for FFA, Antioxidant, Phenolic, flavonoid content and overall acceptability were observed similar, thus indicating reliability of the software. Thereafter, storage study analysis for a period of 30 days of prepared burfi was performed in terms of FFA and overall acceptability. FFA content increased from 1.04% at initial level to 1.42% after 30 days, which remained within desirable limits. Prepared burfi was acceptable upto 30 days on the basis of sensory score and FFA.

■ **Key words :** Ghee residue, Burfi, Honey, FFA, Antioxidant activity, Phenolic content, Flavonoid content, Sensory characteristics, Response surface methodology

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