



Research Article

Natural Colorant from Black Rice Bran Improves Functional Properties and Consumer Acceptability of Yogurt

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Abstract

Background and Objective: Natural food colorants are utilized by the food industry as a safe health enhancing substitute for synthetic dyes. This study was conducted to investigate the effects of natural black rice bran colorant powder (BCP) addition on the properties of yogurt during storage at 4°C for 28. **Materials and Methods:** Plain yogurt and yogurt containing different levels of BCP [0.0125, 0.025, 0.05, 0.10 and 0.20% (%w/v)] were analyzed for total anthocyanins and phenolic contents, physicochemical quality parameters, functional properties and sensory characteristics. **Results:** Results showed that bioactive compounds and functional properties of yogurts with added BCP were improved and sensory characteristics were acceptable to panelists over storage time, with optimal level of BCP addition determined as 0.05%. Yogurts prepared by adding BCP contained higher total anthocyanins and exhibited higher liking scores in both color and appearance. **Conclusion:** Yogurt fortification with natural colorant powder from black rice bran has potential to improve both quality and functional properties of yogurt.

Key words: Anthocyanins, black rice bran, colorant powder, synthetic dyes, yogurt

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Data Availability: All relevant data are within the paper and its supporting information files.