



Quality Evaluation and Storage Stability of Spinach Puree Enriched Instant Noodles

P.D. Shere, Prashant Sahni^{1*} and A.N. Devkotte

MIT College of Food Technology, MITADT University, Pune, Maharashtra, India

¹Department of Food Science and Technology, Punjab Agricultural University, Ludhiana-141 004, India

*Email: ftech.sahni@gmail.com

Abstract: Instant noodles were prepared by adding spinach puree at 0,10,20,30,40 and 50gm puree per 100 gm flour. The noodles were evaluated for its various quality characteristics viz. cooking quality, proximate constituents and sensorial characteristics; followed by evaluation of its storage quality during the storage of 12 months. The cooking time was reduced drastically with addition of spinach puree in noodles. The cooking loss and swelling index decreased progressively with increase in level of puree in composite flour. Cooking weight increased linearly, protein and fat remained unchanged, whereas ash and fiber increased, and carbohydrates were decreased with increase in level of spinach puree in noodles. The sensory quality with respect to colour, texture and overall acceptability of noodles were improved. Noodles with 40gm puree per 100 gm flour scored highest. The results pertaining to storage studies revealed that moisture content increased significantly and progressively during storage of 12 months in LDPE and HDPE. However, increase in moisture content was more pronounced after 6 months. Peroxide value and free fatty acids were increased marginally during storage in both LDPE and HDPE and the values were within the prescribed limits. There was no yeast and mould growth during 6 months of storage in both the packages. The total plate count increased with increase in the moisture content and it was more pronounced in LDPE as compared to HDPE pouches. The microbial load was well within the tolerable limits during storage.

Keywords: Instant noodles, Spinach puree, Storage study, Quality
