

Development of flat bread fortified with fresh, paste and dried (powder) form of red bell pepper

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In this study, the effect of incorporation of various forms of red bell pepper (fresh, powder and paste) on the sensory characteristics, consumer acceptability, texture, color and nutritional quality of flat bread was evaluated. Fresh bell pepper, dried bell pepper and paste were used in bread at different substitution levels: Dried at the levels of 1.5%, 2% and 5%; paste at the levels of 10%, 15% and 20% and fresh bell pepper at the levels of 10%, 15% and 20% (wt/wt of wheat flour). The dried powder at the level of 1.5%, paste at the level of 20% and fresh bell pepper at the level of 20% were selected for product formation as they provided good texture, good flavor, better product quality and high nutritional value. The product was analyzed for various quality characteristics viz. total phenols, antioxidants, protein, fat, ash, moisture and texture, crude fiber, carotenoids, antimicrobial activity, yeast and mold counts. The product was found to have high functional value due to the high content of phytochemicals like carotenoid and total phenols. The bread enriched with fresh red bell pepper (23.71% M.C, 0.004% A.C, 5.41% F.C), dry red bell pepper powder (21.81% M.C, 0.006% A.C, 10.48% F.C) and red bell pepper paste (21.81% M.C, 0.005% A.C, 5.91% F.C) has high moisture, ash and fiber content as compared to control bread (19.05% M.C, 0.001% A.C, 3.45% F.C). Product prepared with powder (1.5%) had high phenolic content and antioxidant activity as compared to other breads which incorporated with fresh red bell pepper (20%) and paste (20%). Product (bread) incorporated with paste of red bell pepper has good appearance and bright in color. Fresh bell pepper product had high sensory scores as compared to others. According to these results, the use of bell pepper can enhance nutritional quality as well as the sensory characteristics of bread.

Biography

Akashdeep Kaur has completed Bachelor of Science in Home Science in 2017 from Punjab Agricultural University, Ludhiana. Currently she is pursuing Master of Science in Food Technology in Punjab Agricultural University.