Title of the Dissertation: Effect of carrot powder fortification on Nutritional and Sensory quality of Bread

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Abstract

Breads are group of staple food product around the world, provided us with more energy value, iron, nicotinic acid and vitamin B1. Food fortification is the public health policy of adding micronutrient (essential trace elements and vitamin) to foodstuff to ensure that minimum dietary requirement are met, also to promote a general state of well-being in different populations, and possibly to prevent certain chronic diseases. Vitamin A deficiency is a major public health problem, prevalent in the developing world. Solution of this problem especially in India can be found by developing low cost, β -carotene rich supplementary foods that would combine a major cereal to fulfill the desired characteristics. Carrot, an important source of dietary carotenoid, contain high amount of β -carotene (Desobry et al., 1998) and low price.

Carrot was processed to make carrot powder by drying at 65°C for 6 hours. These were incorporated into bread in different level to increase vitamin A levels. Results revealed that bread fortified with carrot powder is a good source of crude fibre and carotene. The fortification is done with incorporating 5g, 10g and 15g of carrot powder. It was seen that with increasing carrot powder level the level of carotene and crude fibre content of bread is increase. Sensory evaluation of fortified bread showed that, bread with 5g and 10g were compared with normal bread than bread with 15g of carrot powder.

Key words: bread, carrot, fortification, carotene, crude fibre