STUDY ON SENSORY CHARACTERISTICS OF INULIN ENRICHED STERILIZED FORTIFIED FLAVOURED MILK DRINK

Mehar Afroz Qureshi¹; S. Karthikeyan²; K. Punita³; S. Uprit⁴ and A.K. Agarwal⁵

¹College of Dairy Technology, C.G.K.V., Raipur (CG)
²College of Dairy Technology, C.G.K.V., Raipur (CG)
³KVK Mahasamund, I.G.K.V., Raipur (CG)
⁴College of Dairy Technology, C.G.K.V., Raipur (CG)
⁵College of Dairy Technology, C.G.K.V., Raipur (CG)

Abstract: The effect of various levels of inulin on the inulin enriched sterilized flavoured milk drink is developed and fortified with iron and vitamin A. The product was prepared by replacing milk fat with inulin at 0, 1, 2, 3 and 4 % levels. The product was also fortified with vitamin A and iron. The sensory evaluation of the product was carried out on different attributes using 9 point hedonic scale. The effect of various levels of inulin on the sensory characteristic of sterilized fortified flavoured milk drink was investigated. The level of inulin had significantly influenced the sensory characteristics of product. The product containing 1% milk fat and 2% inulin (T_3) was found to be more acceptable than all treatments.

Keywords: Inulin, Sterilize, Milk

REFERENCES

Amerine, M.A., Pangborn, R.M. and Roessler, E.B. (1965). Principles of sensory evaluation of food. *In*: Food Science and Technology Monographs. pp.338-339. Academic Press, New York.

Bhardwaj, P.K. and Beniwal, B.S. (2009). Technology development and calorie reduction in flavoured milk. *J. Dairying, Foods & H.S.* 28 (3/4) : 190-193.

El Behairy, S.A.; Hafiz Naglaa A.and El-Fatah, E. Abd. (2011). Biochemical, Histopathological and Cytogenetic Evaluation of Fortified Milk and Yoghurt with Zinc and Iron Salts in Male Albino Rats. *Global Journal of Biotechnology & Biochemistry*. 6 (3): 129-141.

Fiorito LM, Mitchell DC, Smiciklas-Wright H, Birch LL. (2006). Dairy and dairy-related nutrient intake during middle childhood. *J Am Diet Assoc*. 106:534-542.

http://www.nddb.org/English/Statistics/Pages/Milk-Production.aspx.

Huth PJ, DiRienzo DB and Miller GD. (2006). Major scientific advances with dairy foods in nutrition and health. *J Dairy Sci.* 89:1207-1221.

Kelly, Greg. (2009). Inulin-Type Prebiotics: A Review (Part 2). *Alternative Medicine Review Volume* 14(1), 36-55.

Kolida, S.; Tuohy, K. and Gibson, G. R. (2002). Prebiotic effects of inulin and oligofructose. *British Journal of Nutrition.* 87(2), 193–197.

Meijers B.K.I. (2010). *P-Cresyl Sulfate Serum* Concentrations in Haemodialysis Patients Are Reduced by the Prebiotic Oligofructose-Enriched Inulin. *Nephrology Dialysis Transplantation.* 25: 219-224.

Moore CE, Murphy MM, Holick MF. (2005). Vitamin D intakes by children and adults in the United States differ among ethnic groups. *J Nutr.* 135:2478-2485.

Tako E, Glahn RP, Welch RM, Lei X, Yasuda K, Miller DD. (2007). "Dietary inulin affects the expression of intestinal enterocyte iron transporters, receptors and storage protein and alters the microbiota in the pig intestine". *Br J Nutr.* 99 (9): 1– 9. <u>http://www.ncbi.nlm.nih.gov/pubmed/17868492</u>.