Physico-Chemical and Sensory Properties of Orange Marmalade Supplemented with Aloe vera Powder

Authors: Farhat Rashid

Abstract : A study was conducted at the Institute of Food Science and Nutrition, University of Sargodha, Sargodha, Pakistan, to evaluate the effect of different concentration of Aloe vera (Aloe barbadensis Mill.) powder on physicochemical and sensory properties of orange marmalade. All treatments (0, 2, 4 6, 8 and 10% Aloe vera powder) were analyzed for titratable acidity, TSS, pH, moisture, fat, fiber and protein contents. The data indicated gradual increase in titratable acidity (0.08 to 0.18%), moisture (0.23 to 0.48%), protein (0.09 to 0.40%) and fiber (0.12 to 1.03%) among all treatments with increasing concentration of Aloe vera powder. However, a decreasing trend in pH (3.81 to 2.74), TSS (68 to 56 °Brix) and fat content (1.1 to 0.08%) was noticed with gradual increase in concentration of Aloe vera powder in orange marmalade. Sensory attributes like color, taste, texture, flavor and overall acceptability were found acceptable among all treatments but T1 (2% Aloe vera powder) was liked most and T5 (10% Aloe vera powder) was least appealing to the judges. It is concluded from present study that the addition of different concentrations of Aloe vera powder in orange marmalade significantly affected the physicochemical and sensory properties of marmalade.

Keywords: orange marmalade, Aloe vera, Aloe barbadensis mill, physicochemical, characteristics, organoleptic properties, Pakistan, treatments, significance

Conference Title: ICFPE 2016: International Conference on Food Process Engineering

Conference Location : London, United Kingdom **Conference Dates :** February 25-26, 2016