Determination of Formaldehyde on Meatballs using Potentiometric and Spectrophotometric Methods

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ABSTRACT

Formaldehyde is one of the dangerous additives in food so it requires a fast analysis method. The aim of this research was to measure the formaldehyde content in meatball samples using the potentiometric method and the spectrophotometric standard method. First step is making a formaldehyde sensor using cellulose acetate as an ionophore. The next step is measuring the formaldehyde content in meatball using a formaldehyde sensor and spectrophotometer. The results showed that formaldehyde content in meatball samples about 1.32; 2.13 and 3.03 ppm using formaldehyde sensor, while using a spectrophotometer about 1.45; 2.12 and 3.14 ppm. The results of statistical calculations showed that the formaldehyde determination between this two methods did not show any real difference.

KEYWORD: formaldehyde, potentiometric, sensor, spectrophotometric