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STUDY OF PRESENCE OR ABSENCE OF FORMALDEHYDE IN FRESH MILK IN THIKA TOWN, MAJENGO AND MAKONGENI ESTATES.

A research project submitted in partial fulfillment for the award of Bachelor of Pharmacy Degree at Mount Kenya University.

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ABSTRACT

Milk is a very valuable food, readily digested and absorbed. It consists of nutrients which are needed for proper growth and maintenance of body. In Thika, milk is transported from the point of production to consumers, through middlemen. They don’t maintain proper hygienic conditions during this transport, which leads to increase in total viable bacterial count and this decreases its shelf-life. Various preservatives like formaldehyde and hydrogen peroxide are added to improve shelf-life. Some of these preservatives cause very serious health related problem. Formaldehyde exposure is a safety concern in human health and is considered carcinogenic by the International Agency for Research on Cancer (IARC). The study determined whether retail milk bar-owners obtain milk directly from farmers or from middlemen, it also determines common methods of milk preservation and finally, the study of presence or absence of formaldehyde in fresh milk.

It is an experimental study and also questionnaires were used. The area of study was Thika Town, Majengo and Makongeni estates found in Kiambu County.

The findings showed that most of the milk was preserved by boiling. However, 4.8% of the samples of the milk contained formaldehyde. It is recommended that further research to be carried out to determine the quantities of formaldehyde in milk and also the origin of milk containing formaldehyde.