

UNIVERSITI TEKNOLOGI MARA

**MICROBIOLOGICAL QUALITY OF RAW
GOAT MILK BASED ON HYGIENIC
PRACTICES AT GOAT FARMS WITHIN
KLANG, SELANGOR**

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Project submitted in fulfillment of the requirements for
the degree of
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(Hons.)

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DECLARATION BY STUDENT

Project entitled “Microbiological Quality of Raw Goat Milk Based on Hygienic Practices at Goat Farms within Klang, Selangor” is a presentation of my original research work. Whenever contributions of others are involved, every effort is made to indicate this clearly, with due reference to literature, and acknowledgement of collaborative research and discussions. The project was done under the guidance of Project Supervisor, Dr. Nadiatul Syima Binti Mohd Shahid. It has been submitted to the Faculty of Health Sciences in partial fulfilment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons).

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ABSTRACT

Introduction: Raw goat milk is known as one kind of nutritious food owed to its originality and medicinal values. Unfortunately, because of its high nutritive value and high moisture content, raw goat milk serves a good medium for microbial growth that able to deteriorate the raw milk quality and life span of raw milk. **Objective:** This study aimed to determine presence of selected microorganism in raw goat milk at different goat farm within Klang, Selangor based on hygienic practices on goat farms. **Methodology:** There are 30 samples were taken from 5 different goat farms. **Result & Discussion:** 53.33% of samples are positive with presence of *E. coli*, all the samples presence with coliform and meanwhile, 26.67% of samples are positive with *Salmonella spp.* The mean for *E. coli*, coliform count and *Salmonella spp.* are 2.20 log CFU/ml, 6.33 log CFU/ml and 0.27 log CFU/ml. The goat management, sources of water used for goat farms, types of milking utensils, washing milking utensil before used, washing hand before milking and cleaning teat/ udder of goat before milking are hygienic practices that must be taken into consideration for the presence of microorganism in raw goat milk. **Conclusion:** Therefore, awareness creation about quality raw milk production and emphasizes hygienic practices on the goat farms in necessary to inhibit the growth of microorganism in raw milk. Thus, the concerned body shall control quality of raw goat milk and also set standard for microbial quality.

Key words: Goat farms, raw goat milk, hygienic practices, *E. coli*, *Salmonella spp.*, coliform, microorganism