Rattanakorn Saenthumpol 2009: Real Time Study on Raw and Pasteurized Goat Milk Quality Produced by Farmers in Central and Western Parts of Thailand. Master of Science (Food Safety), Major Field: Food Safety, Department of Animal Science. Thesis Advisor: Assistant Professor Sasitorn Nakthong, Ph.D. 102 pages.

The objective was to study on goat milk composition and quality of raw milk and pasteurized milk produced by farmers in central and western parts of Thailand; Nontaburi, Ratchaburi and Kanchanaburi province. A 250 ml. of raw and pasteurized milk samples were collected in sterized bottle. Heat treatment was conducted by farmers that were divided into four different methods; 1) at 100^{o}C, 10 s., 2) at 80 ^{o}C, 5 min., 3) at 72 ^{o}C, 15 min. and 4) at 80 ^{o}C, 10 s. Data were evaluated twice month (Jan-March, 2008) and analysed by ANOVA and Pair Sample T-test. The result showed that raw and pasteurized milk of method no. 3 had a significantly highest in fat content, protein, lactose, solid not fat and total solid ($P<0.05$). There were detected total plate count, *E. coli*, Coliform and *Bacillus cereus* in raw milk samples from four farms upper legal standard. *Salmonella* spp. and *Listeria monocytogenes* were not found in raw milk samples. *Clostridium perfringens* was not detected in the pasteurized milk samples. Heat treatment of method no.1 was the most losses of calcium (%) in pasteurized milk. The trends of milk composition and total plate count decreased during day 1 and day 7 of storage time. Meanwhile, *Bacillus cereus* increased at day 7 of storage time.

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