

MILK QUALITY AND CONSUMERS' BEHAVIOR, CHIANG MAI PROVINCE

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Abstract Milk is a popular health drink, which contains various nutritious elements. Nowadays, there are several dairy producers supplying raw milk to the processing factory in Chiang Mai. This study was carried out to examine the quality of ready to drink milk in Chiang Mai market and to determine Chiang Mai milk consumers' behaviors. Milk samples were collected for laboratory testing of component and contamination, and questionnaire was used to record consumers' behavior. A stratified sampling procedure was used to select milk and questionnaire responder. The number of samples and questionnaire from 21 districts in Chiang Mai were equal to the proportion of the population in that district or group of districts.

A total of 1718 milk samples tested included 935 UHT milk samples, 438 pasteurized milk samples, 302 sterilize milk samples and 43 boiled milk samples. UHT, pasteurize and sterilize milk had average fat, protein, lactose, total solid, solid not fat, calcium and phosphorus significantly ($p < 0.01$) higher than boiled milk. A large percentage of boiled milk had total solid (70%) and solid not fat (98%) lower than the standard issued by the Ministry of Public Health. No coliform was found in UHT and sterilize milk, while 5% and 34% of pasteurized milk and boiled milk were contaminated. No *Salmonella spp.*, *S. aureus*, *C. perfringens*, cadmium or lead was found in any milk sample.

From a total of 1074 questionnaire responders, 92.6% consume milk. The majority of consumers consumed milk for health (79.4%), preferred natural flavour milk (42.5%) than sweeten (32.9%) and chocolate (10.8%) flavour. The most important factor for choosing milk product is nutritional component (81%) followed by taste (66.8) and price (55.3%). Most consumers did not know the milk composition although most read label (91.8%). In conclusion, ready to drink milk in Chiang Mai market had acceptable quality and the consumers were mostly concerned about the quality of milk product they bought. **Chiang Mai Veterinary Journal 2006;4(1):31-42.**

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