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THE CHEMISTRY AND PROCESSING GOATS' MILK

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ABSTRACT FOR LIST OF PUBLICATIONS

The keeping of dairy goats is increasing steadily in the United States. The dairy goat is especially adaptable to a small farm operation with marginal grazing and, if properly managed, can provide some income to the milk producer. Goats' milk is nutritionally equivalent to cows' milk except in its content of vitamin B_{12} and folacin. The major proteins of goats' milk are the β-caseins; α_{s1}-casein, the major casein of cows' milk is absent from goats' milk. The short-chain, free fatty acids (C4:0 - C10;0) play a major role in the "goaty" flavor which is considered desirable in some cheeses but is a defect in fluid milk and other manufactured products. Breed differences, handling practices, and buck odor may also be involved in "goaty" off-flavor development. Major marketing problems are the seasonality of the milk supply and distribution costs. Retail sales average 1 quart per week per 1,000 population; over 70% of urban areas in the United States have no supply of goats' milk. If the dairy goat industry is to grow, there must be well-coordinated marketing plans in addition to current research and development programs aimed at supplying quality goats' milk products ot the consumer.

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