

Letter to the Editor

Dermatological and allergic hazards of cheesemakers

Rennets, antimicrobial agents, and milk may produce allergic and irritant reactions in cheesemakers. Suparen®, a rennet from *Endothica parasitica*, has been reported to be a cause of bronchial asthma (4) and food proteins a cause of allergic eczema (2). *Penicillium* molds growing on the surface of stored cheese may cause allergic alveolitis in cheese washers (3).

This paper describes a case of rennet-induced asthma; primary irritant hand eczema occurring in cheese workers is also reported.

CASE REPORT

A 38-year-old female cheesemaker who had suffered from shortness of breath for three years was sent to our hospital for further study. She had worked in a dairy for four years and had handled powdered rennets for the same length of time. Scratch tests with the rennets as such were made on her back. Suparen® elicited a positive immediate reaction, but another rennet of natural origin (calf stomach) was negative. The rennets used in the dairy were replaced by liquid ones, and the worker became free of further symptoms. Scratch tests with the same rennets in ten control subjects were negative.

EXAMINATIONS IN TWO CHEESE DAIRIES

Sixteen cheesemakers in two small cheese dairies were examined in the winter of 1977—1978. Two workers were exposed to liquid rennet (an enzyme of *Mucor miehei*) every day, and five to the previously mentioned powdered rennets. All the workers were subjected to scratch and scratch-epicutaneous tests (1) with these rennets, with five other rennets used in Finland in recent years, and with milk proteins (Allergologisk Laboratorium A/S, Copenhagen). In addition, *Penicillium* (Dome Laboratories) was tested intra-cutaneously. The tests were read after 15 min and 24 h. All the tests remained negative.

The workers were interviewed for skin, nasal or bronchial symptoms. Five of them complained of nasal discharge, cough, or pharyngeal irritation when exposed to powdered rennets, and three suffered from transient vesicopapules on their hands and forearms. The skin symptoms were mild, and no therapy was required.

COMMENT

The dust of powdered rennets used in cheesemaking seems to irritate the nasal, pharyngeal and bronchial mucosae; this discomfort can be avoided when liquid rennets are used. Allergic reactions to rennets and milk proteins may occur.

The occurrence of primary irritant hand dermatitis is explained by the fact that workers do all the work with their bare hands. Strong sodium chloride solutions and milk proteins are the principal irritants.

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Drs. A. Niinimäki and S. Saari
 Department of Dermatology
 University of Oulu
 SF-90220 Oulu 22
 Finland