

ACCESSION NUMBER: 92-02-P0019

TITLE: Predictive microbiology for monitoring spoilage of dairy products with time-temperature integrators.

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PUBLICATION YEAR: 1991

SOURCE (BIBLIOGRAPHIC CITATION): Journal-of-Food-Science; 56 (5) 1209-1215, 39 ref.

ISSN OR ISBN: ISSN: 0022-1147

LANGUAGE OF TEXT: En (English)

SUBJECT CODE: P Milk-and-dairy-products

ABSTRACT: Time/temp. integrators (TTI) have a potential for monitoring time-temp. history of perishable foods, including dairy products. To correlate the end of shelf life of dairy products with different TTIs, kinetic data for growth of a dairy spoilage microorganism was obtained. Both Arrhenius and square root equations were used to model the growth of *Pseudomonas fragi*. A significant negative history effect was observed for *P. fragi* growth rate, whereas history effect was positive on the lag phase, under certain nonisothermal conditions. A correlation scheme of *P. fragi* growth was developed with the TTI response. The application of TTIs for dairy products is feasible despite the history effects.

DESCRIPTORS: SPOILAGE-; MICROORGANISMS-; APPARATUS-; DAIRY-PRODUCTS;
SPOILAGE-MICROBIAL

UPDATE CODE: 9202