Volume 60 Number 4 November 1993

## JOURNAL OF DAIRY DAIRYING LACTATION FOOD

Cambridge University Press

Published online by Cambridge University Press

## JOURNAL OF DAIRY RESEARCH

- Executive Editors: B. A. ROLLS, M. L. GREEN, AFRC Institute of Food Research, Earley Gate, Whiteknights Road, Reading RG6 2EF, UK
- Consulting Editors: R. G. VERNON, Hannah Research Institute, Ayr KA6 5HL, UK; B. A. LAW, AFRC Institute of Food Research, Reading; A. J. BRAMLEY, University of Vermont, Burlington, VT 05405-0094, USA; K. HAYASHI, National Food Research Institute, Kannondai, Tsukuba, Ibaraki 305, Japan

Assistant Editors: B. F. BONE, M. C. A. GRIFFIN, C. J. WILDE Editorial Assistant: B. GILLIAN DAY Secretary: C. J. STAKER

The Journal of Dairy Research publishes original research on all aspects of dairy science. These include animal husbandry, the physiology, biochemistry and endocrinology of lactation, milk production, composition, preservation, processing and separation, biotechnology and food science, properties of milk proteins and other components, relevant studies in bacteriology, enzymology and immunology, dairy products such as cheese, fermented milks and spreads, the use of milk products in other foods, and the development of methods relevant to these subjects.

The subscription to volume 60, 1993, of the Journal of Dairy Research (ISSN 0022–0299) is £149.00 (USA, Canada and Mexico US \$278.00) for a volume of four parts published quarterly in February, May, August and November. Single copies may be purchased at £38.00 net (USA, Canada and Mexico US \$72.00) each, plus postage. Orders, which must be accompanied by payment, may be sent to any bookseller or to Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU. Subscribers in the USA, Canada or Mexico should send their orders to Cambridge University Press, The Journals Department, 40 West 20th Street, New York, NY 10011–4211. Japanese prices for institutions (including ASP delivery) are available from Kinokuniya Company Ltd, P.O. Box 55, Chitose, Tokyo. Second class postage paid at New York, NY and at additional mailing offices. POSTMASTER: send address changes in USA, Canada and Mexico to Journal of Dairy Research, Cambridge University Press, 110 Midland Avenue, Port Chester, NY 10573–9864.

## © Proprietors of Journal of Dairy Research 1993

*Copying.* This journal is registered with the Copyright Clearance Center, 27 Congress Street, Salem, MA 01970. Organizations in the USA who are also registered with CCC may therefore copy material (beyond the limits permitted by sections 107 and 108 of US Copyright law) subject to payment to CCC of the per-copy fee of \$5.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0022-0299/93 \$5.00 + .00.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

ISI Tear Sheet Service, 3501 Market Street, Philadelphia, PA 19104. USA, is authorized to supply single copies of separate articles for private use only.

For all other use, permission should be sought from Cambridge or the American Branch of Cambridge University Press.

Back Volumes. Enquiries about the price and availability of back volumes should be sent to the publishers.

*Claims* for the replacement of journals believed to have been lost in transmission will only be entertained if made immediately upon receipt of the subsequent issue.

The journal is listed in the major relevant abstracting and indexing services worldwide, including: Analytical Abstracts, Biological Abstracts, Biotechnological Research Abstracts, Chemical Abstracts, Current Awareness in Biological Sciences, Current Contents, Dairy Science Abstracts, Food Science and Technology Abstracts and Nutrition Abstracts and Reviews.