

JOURNAL OF DAIRY SCIENCE

Since 1917

American Dairy Science Association
Founded 1906
309 West Clark Street
Champaign, IL 61820
AC/217-356-3182

OFFICERS

President

L. H. Schultz
University of Wisconsin

Vice President

R. T. Marshall
University of Missouri

Treasurer

T. H. Blosser
Beltsville, MD

Past President

J. H. Martin
Clemson University

Executive Secretary

Claude J. Cruse
Champaign, IL

DIRECTORS

D. L. Bath
University of California

D. G. Braund
Syracuse, NY

A. E. Freeman
Iowa State University

C. V. Morr
Clemson University

N. F. Olson
University of Wisconsin

G. H. Richardson
Utah State University

EDITOR-IN-CHIEF

L. D. McGilliard
Michigan State University

ASSOCIATE EDITOR

C. A. Ernstrom
Utah State University

TECHNICAL EDITOR

Cheryl Nimz
Champaign, IL

JOURNAL MANAGEMENT COMMITTEE

Chairman

E. H. Marth
Department of Food Science
University of Wisconsin
Madison, WI 53706

A. E. Freeman
Iowa State University

E. M. Kessler
The Pennsylvania State
University

T. Kristoffersen
The Ohio State University

R. C. Lamb
Utah State University

EDITORIAL BOARD

Research

F. R. Allaire (83) OH
R. R. Anderson (83) MO
R. W. Blake (84) TX
J. H. Britt (84) NC
R. J. Brown (83) UT
L. J. Bush (85) OK
R. J. Collier (84) FL
C. L. Davis (83) IL
R. J. Eberhart (83) PA
W. N. Eigel (83) VA
R. A. Erdman (84) MD
R. L. Fogwell (84) MI
J. W. Fuquay (84) MS
E. D. Glass, Jr. (84) PA
F. C. Gwazdauskas (84) VA
E. G. Hammond (84) IA
P. M. T. Hansen (84) OH
G. L. Hargrove (84) PA
R. J. Harmon (85) KY
J. H. Herbein (84) VA
R. B. Hespell (85) IL
J. B. Holter (85) NH
A. G. Hunter (84) MN
P. G. Keeney (84) PA
D. W. Kellogg (83) AR
A. Kilara (84) PA
T. E. Kiser (84) GA

T. R. Klaenhammer (84) NC
D. H. Kleyn (84) NJ
D. B. Lund (84) WI
R. T. Marshall (84) MO
L. L. McKay (84) MN
E. M. Mikolajcik (85) OH
J. K. Miller (84) TN
H. A. Morris (84) MN
M. W. Neathery (83) GA
J. H. Nelson (84) IL
H. D. Norman (84) MD
M. J. Paape (84) MD
C. E. Polan (84) VA
R. L. Richter (84) TX
T. Richardson (84) WI
F. L. Schanbacher (83) OH
L. R. Shull (83) CA
W. E. Vinson (85) VA
C. H. White (84) LA
J. W. Young (84) IA

Our Industry Today

L. R. Brown (85) CT
M. F. Hutjens (83) IL
F. V. Kosikowski (84) NY
R. J. Lowrie (83) Canada
G. Moskowitz (85) WI
C. W. Richardson (84) OK

Manuscripts offered for consideration should be sent to the ADSA office, 309 West Clark Street, Champaign, IL 61820, in accordance with the Instructions to Authors, *J. Dairy Sci.* 66:181. Reprints of instructions available from ADSA.

Membership: \$25 per year. Student affiliate membership \$12.50 per year (\$6.25 without the Journal). Membership in the Association is on a calendar year basis from January through December. Dues should be sent to the ADSA office.

Institutional Members: \$40 per volume, one volume per year, January through December. New memberships and renewals begin with the first issue of the current volume and should be sent to the ADSA office.

Change of Address: All matters pertaining to the receipt of the Journal and changes in the mailing list should be sent to the ADSA office.

Claims: Claims for copies lost in the mail must be received within 30 days (90 days foreign) of the date of issue to insure free replacement.

Microfilm: Reprints of articles published in the *Journal of Dairy Science*, volume 1, 1917 through volume 54, 1971 are available from Xerox University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. Rates provided by Xerox University Microfilms upon request.

Journal of Dairy Science (ISSN 0022-0302) is published monthly by the American Dairy Science Association, 309 West Clark Street, Champaign, IL 61820. Second class postage paid at Champaign, IL and at additional mailing offices. Form 3579 to be returned to the American Dairy Science Association, 309 West Clark Street, Champaign, IL 61820.

Printed at Kowa Graphics, Inc., Champaign, IL USA. All rights reserved. Reproduction in whole or part prohibited.