

JAMA[®]

The Journal of the American Medical Association
109 Years of Continuous Publication

All articles published, including editorials, letters, and book reviews, represent the opinions of the authors and do not reflect the official policy of the American Medical Association or the institution with which the author is affiliated, unless this is clearly specified.

Editor: George D. Lundberg, MD

Deputy Editor: Richard M. Glass, MD

Deputy Editor (West): Drummond Rennie, MD

Senior Editor: Margaret A. Winkler, MD

Senior Contributing Editor: M. Therese Southgate, MD

Contributing Editors: Charles B. Clayman, MD, Heiene M. Cole, MD, David S. Cooper, MD, Harriet S. Meyer, MD, Canin M. Olson, MD, Jeanette M. Smith, MD, Jody W. Zylke, MD

Consulting Editors: Roger C. Bone, MD, C. Thomas Caskey, MD

Statistical Editor: Naomi Vaisrub, PhD

Associate Senior Editor: Annette Flanagan

Medical News—Editor: Phil Gunby; **Associate Editors:** Paul Cotton, Marsha F. Goldsmith, Charles Marwick (Washington, DC), Teri Randall, Andrew Skolnick

Associate Editors: Charlene Breedlove, Roxanne K. Young

National Correspondent: Dennis L. Breo

Editorial Systems and Administration Manager: Elaine Williams

Production Manager: M. Kathleen Berka

Electronic Manager: Mary C. Steermann

Editorial Processing Director: Cheryl Iverson

Assistant Editorial Processing Director: Paula Giltman

Assistant Editor: Helga Wutz

Staff Assistants: Diane Darnell, Bonnie Van Clevon

Electronic Coordinator: Mary Ellen Johnston

Production Supervisors: Barbara Clark (Proofreading), Jaye Dickson (Electronic Production), Thomas J. Handrigan (Illustrations), JoAnne Weiskopf (Layout)

Copy Editing: Jane C. Lantz (Manager), Vickey Golden (Freelance Coordinator), Richard T. Porter (Assistant Freelance Coordinator), Paul Frank (Senior Copy Editor/ATEX Specialist), Jennifer Sperry (Senior Copy Editor), Susan R. Benner, Pete Johlle, Kris A. Mainellis, Martin Suter

Proofreading: Gwen Chaffin, Teresa H. Orniotek, Jennifer Reiling

Production Associate: Linda Knott

Senior Production Assistants: Valerie Balkcom, Karen Branham, Brenda Chandler-Haynes, Linda Dalleck, Anita J. Henderson, Leslie Koch, Mary Ann Kuranda, Debra Lucas, Lana Rivera, Lisa Swanson, Regina Vander Reyden, Kate Whetzie

Production Assistant: Janey Stennis

Illustrations and Layout: Juliana K. Mills

Reprint Coordinator: Joseph Reakash

Cover Editor: M. Therese Southgate, MD

Editorial Coordinator: Lenette Williams

Editorial Supervisor: Gale Saulsberry

Editorial Assistants: Linda Baker, Mary Cannon, Kamberly Evans, Shirley Gogins, Lisa Hardin, Sharon Iverson, Patricia Joworski, Mary Ann Lilly, Cheryl Manno, Ethei Pinkston, Dorothy White

Electronic Input Specialist: Vee Bailey

Administrative Assistant: Mary C. Taylor

Scientific and Socioeconomic Indexing Department: Norman Frankel (Director), George Kruto, Mary Kay Tinerella

JAMA, The Journal of the American Medical Association (ISSN 0098-7484), is published four issues per month by the American Medical Association, 515 N State St, Chicago, IL 60610. Phone (312) 464-5000. Cable address "Medico" Chicago.

SUBSCRIPTION RATES—The subscription rate per year is \$20, which is included in the annual AMA membership dues. Nonmembers are charged a higher than basic rate of \$110 for 1 year, \$203 for 2 years in the United States and US possessions; in all other countries, 1 year \$185; 2 years \$353 for expedited air delivery. Non-member medical students and residents are also charged a higher than basic rate of \$55 for 1 year in the United States and US possessions. Rates for subscriptions for delivery to Japan or South Korea are available through respective exclusive agents. Address all subscription communications to Subscriber Services Center, American Medical Association, 515 N State St, Chicago, IL 60610. Phone: (800) 262-2350. Fax (312) 464-5831.

CHANGE OF ADDRESS—POSTMASTER, send all address changes to JAMA, The Journal of the American Medical Association, attention: Subscription Department, 515 N State St, Chicago, IL 60610. Notification of address change must be made at least 6 weeks in advance; include both old and new addresses, a recent mailing label, and your new ZIP code.

Second-class postage paid at Chicago and additional mailing office. GST Registration Number: R 126 225 556.

JAMA[®] Registered in the US Patent and Trademark Office.

Copyright © 1993 by the

American Medical Association 

March 10, 1993, Vol 269, No. 10

To promote the science and art of medicine and the betterment of the public health.

Original Contributions

Periconceptional Folic Acid Exposure and Risk of Occurrent Neural Tube Defects 1257
M. M. Werler, S. Shapiro, A. A. Mitchell, Brookline, Mass

Accuracy of Fecal Occult Blood Screening for Colorectal Neoplasia: A Prospective Study Using Hemoccult and HemoQuant Tests 1262
D. A. Ahlquist, H. S. Wiand, C. G. Moertel, D. B. McGill, C. L. Loprinzi, M. J. O'Connell, J. A. Mailliard, J. B. Gerstner, Rochester, Minn; K. Pandya, Denver, Colo; R. D. Ellefson, Rochester, Minn

A Double-blind Trial of a Nicotine Inhaler for Smoking Cessation 1268
P. Tønnesen, J. Nørregaard, K. Mikkelsen, S. Jørgensen, Copenhagen, Denmark; F. Nilsson, Helsingborg, Sweden

Projections of Hypertension-Related Renal Disease in Middle-aged Residents of the United States 1272
T. V. Perneger, Geneva, Switzerland; M. J. Klag, Baltimore, Md; H. I. Feldman, Philadelphia, Pa; P. K. Whelton, Baltimore, Md

Special Communication

Sigmoidoscopic Screening in the 1990s 1276
D. F. Ransohoff, Chapel Hill, NC; C. A. Lang, Denver, Colo

Council Report

Physicians and Family Caregivers: A Model for Partnership 1282
Council on Scientific Affairs, American Medical Association, Chicago, Ill

Caring for the Uninsured and Underinsured

Access to Prenatal Care Following Major Medicaid Eligibility Expansions 1285
P. Braveman, T. Bennett, C. Lewis, S. Egerter, J. Showstack, San Francisco, Calif

Commentary

How Effective Are Treatments for Diabetic Retinopathy? 1290
F. L. Ferris III, Bethesda, Md

Editorials

Folic Acid—Preventable Spina Bifida and Anencephaly 1292
G. P. Oakley, Jr, Atlanta, Ga

How Should We Screen for Colorectal Cancer? 1294
J. V. Selby, Oakland, Calif

Information for Readers:

The JAMA 1992 Editorial Peer Review Audit 1296
E. S. Williams, G. D. Lundberg, Chicago, Ill

The Cover 1218

John Chamberlain, *Untitled*, M. T. Southgate, Chicago, Ill

Medical News & Perspectives 1223

Influenza's Distant Early Warning System . . . Domestic Violence Hot Line's Demise: What's Next? . . . While National Domestic Violence Hot Line's Down, Other Resources Can Assist Physicians, Patients . . . Revised Justice Department Rule Does Not Require Physician Participation in Federal Executions . . . Clinton Tinkers With Health System Status Quo; Critics Seek to Pick Apart Managed Competition . . . Most US Troops May Leave Somalia by May; Military Medicine Still Likely to Have Role

From the Centers for Disease Control and Prevention 1233

Recommendations for Use of Folic Acid to Reduce Number of Spina Bifida Cases and Other Neural Tube Defects

Poetry and Medicine 1240

Hands M. Goldstein

Domestic Abstracts 1241

JAMA 100 Years Ago 1244

Address on Dietetics—Medical Food Ethics Now and To Come.

Letters 1249

98.6°F W. A. Weiger, M. E. Shaw, J. S. Edelsberg, J. M. Chamberlain, T. E. Terndrup, D. Alexander, S. Binkley, R. Opiekun, G. S. Marion, K. P. McGann, D. H. Walworth, P. A. Mackowiak, S. S. Wasserman, M. M. Levine

Underdosing the Antidote for Acetaminophen A. Anker, M. J. Smilkstein

Evidence-Based Medicine: A New Paradigm for the Patient G. N. Fox, L. Crawley, G. Guyatt

Does Magnesium Prevent Myocardial Infarction? J. W. Nugent, J. E. Dalen, J. Gore

Correction 1254

Data Incorrect Body Fat Distribution and 5-Year Risk of Death in Older Women — A. R. Folsom, S. A. Kaye, T. A. Sellers, C.-P. Hong, J. R. Cerhan, J. D. Potter, R. J. Prineas

Obituary Listing 1301

Resident Forum 1304

Tobacco Control Update

Questions and Answers 1306

Fracture Risk in Woman With Osteoporosis: Must Tennis Cease? S. L. Greenspan, N. M. Resnick

Anticoagulation for Embolic Stroke J. Maher, V. C. Hachinski

Health Risks of Crocotes P. J. Landrigan

Books, Journals, Software 1313

Advanced Dermatologic Diagnosis (Shelley, Shelley) Reviewed by W. P. Coleman III

Disorders of Bone and Mineral Metabolism (Coe, Favus, eds) Reviewed by L. A. Wallis

Articulating the Elephant Man: Joseph Merrick and His Interpreters (Graham, Oehnschlaeger) Reviewed by B. E. Einspruch

Perturbing the Organism: The Biology of Stressful Experience (Weiner) Reviewed by B. S. McEwen

Obstetrics and Gynecology for Medical Students

(Beckmann, Ling, Barzansky) Reviewed by L. Keith, J. Bachicha

Books Received

The 1992 JAMA Peer Reviewers List 1321

Classified Advertising 1329

JAMA Journal Club Reading Assignments 1339

Index to Advertisers 1340

Reference Directories

Meetings in the United States, March 3, 1993; **Organizations of Medical Interest**, January 13, 1993; **Meetings Outside the United States**, January 27, 1993; **State Associations and Examinations and Licensure**, January 20, 1993; **AMA Officials**, October 7, 1992

Instructions for Authors See January 6, 1993, p 152.

JAMA®

The Journal of the American Medical Association

EDITORIAL BOARD

Kenneth A. Arndt, MD, Boston, Mass
Robert J. Blendon, ScD, Boston, Mass
Marjorie A. Bowman, MD, MPA, Winston-Salem, NC
James E. Dalen, MD, Tucson, Ariz
Lois DeBakey, PhD, Houston, Tex
R. Gordon Douglas, Jr, MD, New York, NY
Ronald G. Evens, MD, St Louis, Mo
William H. Foegen, MD, Atlanta, Ga
Renee C. Fox, PhD, Philadelphia, Pa
Daniel X. Freedman, MD, Los Angeles, Calif
William T. Friedewald, MD, New York, NY
Vincent A. Fulginiti, MD, New Orleans, La
Morton F. Goldberg, MD, Baltimore, Md
Samuel Hellman, MD, Chicago, Ill
Michael E. Johns, MD, Baltimore, Md
Robert J. Joynt, MD, PhD, Rochester, NY
Donald A. B. Lindberg, MD, Bethesda, Md
Gordon K. MacLeod, MD, Pittsburgh, Pa
William W. McLendon, MD, Chapel Hill, NC
Arno G. Motulsky, MD, Seattle, Wash
Claude H. Organ, Jr, MD, Oakland, Calif
Edmund D. Pellegrino, MD, Washington, DC
Gregory A. Plotnikoff, MD, Minneapolis, Minn
Uwe E. Reinhardt, PhD, Princeton, NJ
Anne Colston Wentz, MD, Chicago, Ill

INTERNATIONAL ADVISORY COMMITTEE

Bassel Atallah, MD, JAMA—Middle East
Igor Bokarev, MD, JAMA—Russian Language
Mauro Bologna, MD, JAMA—Italy
Michèle Dekker, MD, JAMA—France
Dimítris Dourasos, MD, JAMA—Greece
Yulchiro Goto, MD, JAMA—Japan
Ragini Jain, MD, JAMA—India
Evin Kantermir, MD, JAMA—Turkey
Yong Kak Lee, MD, JAMA—Korea
Tania L. R. Martinez, MD, JAMA—Brazil
Azam Soorma, MBBS, JAMA—Pakistan
Jiří Widimský, MD, DrSc, JAMA—Czech/Slovak
Prof David Todd, JAMA—Southeast Asia
Miguel Vilardell Tarres, MD, JAMA—Spanish Language
Zhang Hongkai, MD, JAMA—China
Ryszard Zochowski, MD, JAMA—Poland

AMA Officers

President: John L. Clowe, MD*
President-Elect: Joseph T. Painter, MD*
Immediate Past President: John J. Ring, MD
Secretary-Treasurer: William E. Jacott, MD*
Speaker, House of Delegates: Daniel H. Johnson, Jr, MD
Vice-Speaker, House of Delegates: Richard F. Corlin, MD

AMA Trustees

Lonnie R. Bristow, MD* (Vice-Chairman); Mary Ann Contogianis, MD (Resident); Nancy W. Dickey, MD*; Palma E. Fomica, MD; Melissa J. Garretson (Student); William E. Jacott, MD* (Secretary); Robert E. McAfee, MD; Thomas R. Reardon, MD; Raymond Scalettar, MD* (Chairman); Jerald R. Schenken, MD; P. John Seward, MD*; Randolph D. Smoak, Jr, MD; Frank B. Walker, MD; Percy Wootton, MD.

*Executive Committee.

Executive Vice President: James S. Todd, MD
Deputy Executive Vice President: Kenneth E. Monroe
Senior Vice President: Larry E. Joyce
Vice President, Publishing: Robert L. Kennett
Editor-in-Chief, Scientific Publications: George D. Lundberg, MD
Publisher: Dennis Joseph Dennehy
Director, Publishing Operations Division: Nawin Gupta, PhD
Director, Circulation Department: Beverly Martin
Director, Fulfillment Department: Ray Healy

ADVERTISING OFFICES: Eastern: 600 Third Ave, Suite 3700, New York, NY 10016 (Representatives: Alice Harvey-Herman, Cliff Vanderhoof [212-867-6640]); Midwest/Farwest: 515 N State St, Chicago, IL 60610 (Representative: Daniel T. Mjolsness [312-464-2475]); Classified Advertising: 312-464-2456

ADVERTISING PRINCIPLES—Advertisements in this issue have been reviewed to comply with the principles governing advertising in AMA publications. A copy of these principles is available on request. The appearance of advertising in AMA publications is not an AMA guarantee or endorsement of the product or the claims made for the product by the manufacturer.

Printed in the USA.

American Medical Association

Physicians dedicated to the health of America

