

SCIENCE NEWS®

The Weekly Newsmagazine of Science

A Science Service Publication
Volume 127, No. 6, February 9, 1985

E. G. Sherburne Jr. Publisher
Joel Greenberg Editor
Dietrick E. Thomsen Senior Editor/
Physical Sciences
Laurie Jackson Phillips Managing Editor
Wendy McCarren Production/Design
Director
Bruce Bower Behavioral Sciences
Joanne Silberner Biomedicine
Stefi Weisburd Earth Sciences
Julie Ann Miller Life Sciences
Janet Raloff, Ivars Peterson Policy/Technology
Jonathan Eberhart Space Sciences
Susan Welch Assistant to
the Editor
Dawn D. Bennett Science Writer Intern
Jane M. Livermore Books
Donald R. Harless Business Manager
Scherago Associates Advertising
Fred Dieffenbach, Sales Director
1515 Broadway, New York, N.Y. 10036

Copyright ©1985 by Science Service, Inc.,
Editorial and Business Offices,
1719 N St., N.W., Washington, D.C. 20036.
Republication of any portion of SCIENCE NEWS
without written permission of the publisher is
prohibited.

Subscription Department
231 West Center Street, Marion, Ohio 43305

Subscription rate: 1 yr., \$27.50; 2 yrs., \$47.50;
3 yrs., \$67.00. (Foreign postage \$5.00 additional per
year.) Change of address: Four to six weeks' notice
is required. Please state exactly how magazine
is to be addressed. Include zip code. For new
subscriptions only call (1) 800-247-2160. Printed in
U.S.A. Second class postage paid at Washington,
D.C. Title registered as trademark U.S. and
Canadian Patent Offices. Published every Saturday
by SCIENCE SERVICE, Inc. 1719 N St., N.W.,
Washington, D.C. 20036. (202-785-2255)
ISSN 0036-8423

Letters

Contradiction reconciled

In "Tour through a taste bud" (SN: 12/22 & 29/
84, p. 393), J.A. Miller states that taste buds are
among the most active replicators in the body,
yet Eugenia Wang ("Finding a cellular sign of ag-
ing," SN: 12/22 & 29/84, p. 390) found statin in
taste buds. The latter article says that "statin
turns up in places like taste buds and heart
muscle, where cells aren't dividing." It would
seem that there is a contradiction here. Please
explain which view is correct.

Ernest O'Byrne
Eugene, Ore.

Both views are correct. In the taste bud, accord-
ing to Wang, the cells of the inner layer do repli-
cate actively to replace cells of the outer layer,
which do not replicate and which, when they
age, are shed from the tongue surface. Wang
says that the protein statin is found only in the
taste bud's outer layer. —J.A. Miller

This Week

- 84 Raiders of the 'Lost City'
- 84 Chemical warfare review
- 84 Tiny tacks
- 85 1986 Budget—Federal R&D spared from a general axing
- 85 Biomedicine—Ups and downs for health research
- 86 Space—NASA: Fine tuning of momentum
- 86 Earth Sciences—Weathering the budget storm
- 86 Environment—More for cleanups, acid rain studies
- 90 Behavior—Gains and losses mostly single-digit
- 90 Energy—DOE: Defense up, civilian down
- 90 Of berries and bison: Stone Age standards for modern diets

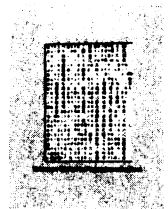
Research Notes

- 88 Earth Sciences
- 88 Food Sciences
- 89 Mathematics
- 89 Technology

Articles

91 Excavating Words: A Geological Tool

Cover: This excerpt from the *Book of the Early Han Dynasty* recounts unseasonably cold weather, failed crops, famine and strange astronomical observations during 43 B.C. Researchers now believe that these occurrences are all signs of an eruption the previous year of Mt. Etna on the other side of the globe. Similar passages from the surviving literature of many ancient civilizations are proving valuable tools in dating and describing volcanos that erupted in the past. (Courtesy Kevin D. Pang)



Departments

- 82 Books
- 83 Letters

Science Service Institution for the public understanding of science founded 1921; a nonprofit corporation.

Board of Trustees—President, Glenn T. Seaborg; Vice President, Gerald F. Tape; Treasurer, Willis Harlow Shapley; Secretary, Julius Duscha; Joseph W. Berg Jr.; Edward Bliss Jr.; Bowen C. Dees; David A. Goslin; Milton Harris; Hilleary F. Hoskinson; O. W. Riegel; H. Guyford Stever; John Troan; Deborah P. Wolfe.

Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver; Business Manager: Donald R. Harless.

Alternative view

I enjoyed the article on high-voltage electron microscopy ("HVEM: The Big Picture of Small Structures," SN: 12/22 & 29/84, p. 392). However, I must take issue with the statement that the "microtrabecular matrix is now recognized as the structure within cells." Although it remains possible that microtrabeculae exist *in vivo*, this is not a proven fact and is not generally accepted as such.

The alternative view is that microtrabeculae represent the cytoskeleton (i.e., filaments composed of actin and other proteins) onto which most of the cell's soluble contents have collapsed during specimen preparation. In fact, this latter view is supported by recent studies using both high-voltage and conventional electron microscopes and therefore enjoys widespread acceptance among cell biologists and biological microscopists.

Walter E. Fowler
Duke University Medical Center
Durham, N.C.

Rocks resurface

The "Halos of Stone" (SN: 1/19/85, p. 42) have nothing on my garden. Each spring I pick up what seems like tons of rocks from a quarter-acre plot. My neighbor collects these and lines his drainage ditch with them, claiming that every year they sink into the ground and must be replaced.

Even though his ditch is nearly a half-mile from my garden, after six years of this I could swear I'm picking up the same damn rocks. This year I intend to prove it—I'm going to spray all the rocks in his ditch with red paint.

Emily Johnston
Westminster, Md.

Correction: The report of joggers being attacked by birds (SN: 1/12/85, p. 24) appeared in the Dec. 27, 1984, NEW ENGLAND JOURNAL OF MEDICINE, not the Dec. 15 LANCET.

FEBRUARY 9, 1985

83