



Science Service Publication
Volume 151, No. 15, April 12, 1997

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SCIENCE NEWS (ISSN 0036-8423) is published weekly on Saturday, except the last week in December, for \$49.50 for 1 year or \$88.00 for 2 years (foreign postage \$6.00 additional per year) by Science Service, 1719 N Street, N.W., Washington, D.C. 20036. Preferred Periodicals postage paid at Washington, D.C., and additional mailing office. POSTMASTER: Send address changes to SCIENCE NEWS, P.O. Box 1925, Marion, Ohio 43305. Change of address: Four to six weeks' notice is required — old and new addresses, including zip codes, must be provided. Copyright © 1997 by Science Service. Title registered as trademark U.S. and Canadian Patent Offices. Printed in U.S.A. on recycled paper. ♻️ Reproduction of any portion of SCIENCE NEWS without written permission of the publisher is prohibited.

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Cover: The network of crystallized silica particles inside this opal scatters light, producing the jewel's fiery iridescence. Before it hardened into a gemstone, the opal started out as a colloid: The silica particles were suspended in a liquid. Scientists are now using colloids to model what happens to materials when they go from liquid to solid.
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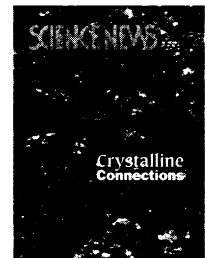
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Letters

Understanding IUs

In your article describing the efficacy of vitamin E supplements (SN: 3/1/97, p. 135), the dosages are given in milligrams. The vitamin E supplements sold over the counter are measured in IUs.

I've asked my pharmacist and my doctor and I've consulted scientific reference books, but I cannot find a definition of IUs or the conversion factor needed to equate them to milligrams.

Would you please enlighten your readers?
*Vincent Sawka
Fredonia, N.Y.*

Vitamin E is a mix of related tocopherol molecules. There is no automatic rule for converting

CORRECTION

In "Deep sea not immune to climate change" (SN: 3/22/97, p. 181), thousands of meters (not kilometers) of water protect organisms near the bottom.
—The Editors

milligrams of vitamin E to international units (IUs), because any conversion will require you to know the particular proportion of different tocopherols present in the vitamin E studied. In the Scottish study, 1 milligram of vitamin E equals about 1.4 IU, so 280 mg translated to about 400 IU.
— J. Raloff

Catastrophic CO₂

Could the phenomena discussed in "Life's Closest Call" (SN: 2/1/97, p. 74) relate to the fatal emissions from an African lake a few years ago?

*Mark Pottenger
Los Angeles, Calif.*

No, they are not the same. Lakes Nyos and Monoun in Cameroon (SN: 4/2/94, p. 215) overturned suddenly and released a cloud of carbon dioxide into the air, killing cattle and people. The Permian scenario would have happened slowly, by human standards, and would have been toxic for marine creatures.
— R. Monastersky

Is carbon dioxide really a toxic gas? Either chemistry and biology have changed a lot since I attended school, or the definition of the word "toxic" has changed.

*Eric W. Gardell
Wappingers Falls, N.Y.*

At high concentrations, carbon dioxide is toxic.
— R. Monastersky

Cheap pills

Robertson states that fish oil and garlic supplements can be as costly as prescription drugs ("Fish oil gets a garlic chaser for the heart," SN: 2/15/97, p. 101).

I buy retail 500-milligram capsules of garlic oil at \$1.49 per 100 (more than 1 month's supply at three capsules per day). I buy Omega-3 fish oil capsules at \$9.60 per 100 (1 month's supply). That is a total of \$11.09.

Tell me where you can get any prescription drug for that price.

*Ralph S. Blois
Woodburn, Ore.*