SCIENCE NEWS

The Weekly Newsmagazine of Science

A Science Service Publication
Volume 123, No. 15, April 9, 1983

Subscription Department
231 West Center Street, Marion, Ohio 43302

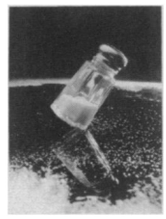
Subscription rate: 1 yr., $27.50; 2 yrs., $47.50; 3 yrs., $67.00. (Foreign postage $5.00 additional per year.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code. For new subscriptions only call **(1) 800-247-2160.** Printed 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

This Week

Research Notes

Articles

Cover: Although the public has never been so strongly encouraged to eat less salt in order to lower and prevent high blood pressure, the role of salt in high blood pressure is complex and controversial. In fact, emerging findings indicate that dietary components other than salt may be just as critical, if not even more so, in combatting high blood pressure. (Photo courtesy of FDA Consumer)



Departments

Letters

Reading problems

The effort to relate "dyslexia" to a gene on chromosome 15 ("Scientists Find Hereditary Form of Dyslexia," SN: 3/19/83, p. 180) seems to me both revealing and dismaying. It illustrates that many scientists have weirdly unrealistic ideas about what schools do, and why we have a vast "reading problem." Dyslexia, a term many refuse to use, means a peculiar brain condition with vague criteria (as the paper in SCIENCE admits) that remarkably only affects white, middle-class students whose parents, or others, are pressuring them for better report cards. Other children who learn to read slowly or poorly are seldom called dyslexic or suffering from "specific reading disability" — they are described simply as poor readers. They number tens of millions.

Even more remarkable, there are many cases of dyslexics who, in proper hands, rapidly improved their reading and became quite capable readers. Favorable instruction, it seems, can readjust gene deficits — a finding of revolutionary scientific importance.

We have much reason to believe that standard instruction in reading in schools *prevents* learning to read overall. The impact of brain-antagonistic teaching of course affects different students in different ways. We get some idea of the damage done, on a huge scale, when we realize that O. K. Moore and associates working at Yale years ago showed that ordinary three and four year olds could easily learn to read and write (type) quite well. In a later trial, after two years first graders were commonly reading at 6th grade levels or above. In short, relating reading achievement to age is absurd to begin with.

As for inherited dyslexia, it should be realized too that the information on previous generations usually has the reliability of gossip or retroactive myth. Some parents, it seems, love to boast of their reading deficit as others say, "I'm hopeless in math." To accept this as data, or heed notoriously unreliable teacher observations, seems naive.

To link A to B, it is necessary to know that A exists as more than a word, used in the classic manner to blame the victim of documented school's failure and adults with some axe to grind.

Leslie A. Hart
New Rochelle, N.Y.

Cold lasers against pain

The use of cold lasers for treating pain ("Zapping Pain: Hot Prospects for the Cold Laser," SN: 2/12/83, p. 100) is widespread in spite of the fact that no adequate research has been reported in the literature to confirm its efficacy. The equipment is expensive, as are the costs of treatment to the patient. The validation of this technique using subjective reporting of chronic pain patients does little to provide information of cold laser therapy effectiveness or mechanisms of action. A model that might be applicable, however, is that used by Dr. Bruce Pomeranz (Department of Zoology, University of Toronto, Toronto, Canada) who elucidated the neurochemical mechanisms and effectiveness of acupuncture in animals (*Exp Neurology* 64:327, 1979, *Life Sciences* 25:1957, 1979). This type of research, while not totally comparable to the human experience of chronic pain, would be a first step to an intelligent application of cold laser therapy to human suffering based on physiological principles as opposed to technological glitter.

Margaret Caudill, M.D., Ph.D.
Beth Israel Hospital
Boston, Mass.