

## MEDICINE

# Work Aids Cardiacs

► **SUITABLE** employment instead of rest and retirement for the severe cardiac patient may become just what the doctor orders.

A study based on 19 persons who would normally be considered unemployable but who were successfully working in industrial and clerical jobs revealed that the physical condition of some of them actually improved after they started working. Dr. Alvin Slipyan of Elmhurst, L. I., N. Y., reports in the *Journal of the American Medical Association* (Sept. 13).

On the basis of his study, he suggests a possible change in the rule that persons with severe heart disease require constant rest and retirement from work.

Of the 19 studied, ten persons had had heart attacks, seven had rheumatic heart disease and two had hypertensive heart disease. They were employed by Abilities, Inc., of Albertson, L. I., N. Y., a company that employs only disabled persons.

The jobs required the effort of walking, but none included heavy labor.

Five of the postmyocardial infarction patients showed no change in physical condi-

tion after employment, three showed definite improvement, and one had increased attacks of pain but showed no increase in disability. One man died of a cerebral embolism, apparently related to an experience in which he was trapped in his car for more than an hour in a snowstorm.

Five of the rheumatic heart disease group showed no change in their condition after starting work and two improved.

One of the hypertensive heart disease employees showed no change in status and the other gradually improved.

Most industries refuse to hire cardiac patients because of the fear of absenteeism and compensation claims. Absenteeism was remarkably low, Dr. Slipyan says, and none of the 19 claimed compensation.

A five-year follow-up study of 431 men who had returned to work after their first myocardial infarction was reported in an earlier *Journal*. The study revealed that none of the patients who had another attack or developed heart failure claimed that it was due to their work.

Science News Letter, September 20, 1958

## MEDICINE

# Study Night Blindness

► **NEW LIGHT** has been shed on the cause and cure of night blindness.

What happens in the body, and especially in the eye, when an animal is deprived of vitamin A, a known cause of vision failure in dim light, has been studied by Prof. George Wald, biology department, and John E. Dowling, medical school student, of Harvard University.

The scientists found that:

Rats placed on a vitamin-A-deficient diet began using the vitamin A stored in their livers. Since the amount varies in individual livers, this may explain why it takes anywhere from a few months to years for humans to develop symptoms of night blindness.

When the supply in the liver was exhausted, the vitamin A level of the blood soon fell until there was none left in the blood.

At this point, the retina, the light-sensitive portion of the eye, began to lose its visual pigment because it no longer had a supply of vitamin A from which to make this substance, the scientists explain in the *Proceedings of the National Academy of Sciences* (July).

Although the amount of visual pigment steadily fell, the protein portion of the pigment remained at its normal level for several weeks. Then the protein began to decline. Microscopic examination of the retina of the eye showed the retinal tissues had begun to deteriorate.

However, doses of vitamin A shifted the direction of these changes, and vision began to improve. But if the night blindness

passed the point at which the retina began to fall apart, the recovery took longer. This may explain why some humans responded slowly to vitamin A administration, the investigators point out.

This study opens a new area for fundamental research in the biological significance of vitamin A. No one knows the precise role the vitamin plays in the body.

Science News Letter, September 20, 1958

## MEDICINE

# The Cardiac Worker; Will He Face Unemployment?

► **A STUDY** of 89 employers' attitudes toward hiring the cardiac worker in St. Paul and Minneapolis revealed the following information:

1. For those companies that consider the age of the employee, it would appear that a cardiac's chances of stable employment might depend on a fixed retirement age rather than his cardiac condition.

2. Twenty of the 89 firms indicated that they would hire persons for initial employment who were known to be cardiacs. An unqualified "no" was given by 32. And 37 of the firms indicated that they would hire cardiacs sometimes, depending upon the nature of the position to be filled.

3. On the question of re-employment of someone who had been afflicted with a heart ailment during his employment with the company, a sense of moral obligation to the worker found strong expression among most of the interviewees. Only four of the

89 firms definitely said they would not continue to employ a cardiac.

4. Fifty-one of the firms indicated that they had some kind of policy regarding employment of cardiacs while 38 indicated that they had none.

Since many types of heart disease are prevalent in those persons from about the age of 30 to 65, many cardiacs fall in the age group that is making the greatest social and economic contribution to society, Dr. Leo G. Reeder, School of Medicine and School of Public Health, University of California, and George A. Donohue of the University of Minnesota, point out in their report in the *Journal of Chronic Diseases* (Aug.).

Science News Letter, September 20, 1958

## SCIENCE NEWS LETTER

VOL. 74 SEPTEMBER 20, 1958 NO. 12

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington 6, D. C., NOth 7-2255. Cable Address: SCIENSERV.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7½ cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright © 1958 by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicated services issued by Science Service. Science Service also publishes CHEMISTRY (eight times a year) and THINGS of Science (monthly).

Printed in U.S.A. Entered as second class matter at the post office at Washington, D. C., under the act of March 3, 1897. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40 P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1925; 39 U. S. Code 283) authorized February 28, 1950. Established in mimeograph form March 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member Audit Bureau of Circulation.



SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: William W. Rubey, U. S. Geological Survey; Wallace R. Brode, National Bureau of Standards; Douglas Whitaker, Rockefeller Institute for Medical Research. Nominated by the National Academy of Sciences: Edward U. Condon, Washington University; Harlow Shapley, Harvard College Observatory; Philip Bard, Johns Hopkins University. Nominated by the National Research Council: I. I. Rabi, Columbia University; Leonard Carmichael, Smithsonian Institution; John R. Dunning, Columbia University. Nominated by the Journalistic Profession: O. W. Riegel, Washington and Lee University; Michael A. Gorman, Flint Journal; Lee Hills, Detroit Free Press. Nominated by the Scripps Estate: Edward J. Meeman, Memphis Press-Scimitar; Frank Ford, Washington, D. C.; Charles E. Scripps, Cincinnati, Ohio.

Officers — President: Leonard Carmichael; Vice President and Chairman of Executive Committee: Charles E. Scripps; Treasurer: Wallace R. Brode; Secretary: Watson Davis.

Staff — Director: Watson Davis. News Editor: Howard Simons. Writers: Marjorie Van de Water, Ann Ewing, Jane Marye, David Pursglove, Benita Tall, Helen Buechl. Science Youth Division: Harold A. Edgerton, Joseph H. Kraus, Dorothy Schriver, Shirley Moore. Photography: Fremont Davis. Production: Priscilla Howe, Marcia Nelson. Syndicate Sales: Hallie Jenkins, Interlingua Division in New York: Alexander Gode, 80 E. 11th St., GRamercy 3-5410. Advertising Manager: Fred A. Moulton, METropolitan 8-2562.