BIOCHEMISTRY

Miracle Drugs in Foods

Foods eaten every day contain very small amounts of antibiotics that have been fed to young chicks and hogs to speed their growth.

➤ ALL OF us are probably eating some of the modern miracle drugs every day with our breakfast eggs and our fried chicken or roast pork for dinner. So far as anyone knows, however, we will not eat enough antibiotics this way to have them do us any good or harm.

The reason we are eating minute amounts now is that mashes containing some of the antibiotic drugs, such as aureomycin and terramycin, are being fed to young chicks and pigs to speed their growth.

Discovery that eggs from commercial hatcheries where antibiotic mashes are fed to chickens contain some of the antibiotics was made by Drs. Donald Greiff and Henry Pinkerton of St. Louis University, St. Louis, Mo.

They found this out in the course of experiments with the germs of typhus fever. These germs, called rickettsiae, were being grown on the yolk sacs of fertile eggs.

When the hatcheries where the eggs came from started using antibiotic feeds, the rickettsiae failed to grow on the eggs. The antibiotics stopped the germs, just as they do when used to treat people sick with typhus fever and many other germ-caused

Antibiotics can get into milk, also. Cheese manufacturers earlier had discovered that the starter organisms for making cheese failed to grow in some lots of milk. This milk, they found, had come from cows that had gotten "shots" of antibiotics to cure them of mastitis.

These cows had gotten the antibiotics injected into their udders, where the mastitiscausing germs were. Feeding antibiotics to lactating dairy cows, however, does not result in any of the antibiotic getting into the milk, according to experiments just reported in the journal, Science (Feb. 22). These experiments were made by M. O.

Haq, L. L. Rusoff and A. J. Gelpi, Jr., of the Louisiana Experiment Station at Baton Rouge.

Eggs are used for growing influenza germs to make anti-'flu vaccines. Influenza A virus will grow on the eggs from antibiotic-fed chicks, the St. Louis University scientists found. But they point out that other disease-fighting experiments in which eggs are used to grow the germs for research purposes may be affected.

Eating eggs, chickens and hogs that have antibiotics in them will not do any harm, in the opinion of the Food and Drug Administration. FDA officials point out that the amount in the egg or meat is so small it could not have any effect on humans eating it. Furthermore, ordinary cooking would destroy the antibiotics.

One possible adverse effect of feeding antibiotics to animals to speed their growth has been pointed out in a report by Drs. M. P. Starr and D. M. Reynolds of the California Experiment Station at Davis, Calif., to the American Journal of Public Health. These scientists warn that the spread of drug-fast strains of germs to larger animals could be serious since the value of the meat of these animals would justify treating them with antibiotics when they get sick.

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A female fly will lay about 500 eggs during her lifetime.

Books of the Week

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holes for various kinds of fits, and conversion tables from English to Metric System.

THE STRANGE STORY OF OUR EARTH: A Panorama of the Growth of Our Planet as Revealed by the Sciences of Geology and Paleontology—A. Hyatt Verrill—Page, 255 p., illus., \$3.75. Translating the story of the earth, which is written in the enduring rocks themselves, into non-technical language.

STUDIES IN THE PSYCHOLOGY OF READING-William C. Morse, Francis A. Ballantine and W. Robert Dixon-University of Michigan Press,

188 p., illus., paper, \$2.50; cloth, \$3.00. Studies of eye movements of school children, graduate students and university professors. This work explodes the myth that some fast readers are able to take in a whole line or even paragraph at a single glance.

SURVIVAL IN WINTER-E. Laurence Palmer-New York State College of Agriculture, 31 p., illus., paper, single copies free upon request to publisher, Cornell University, Ithaca, N. Y. One of the Cornell Rural School Leaflets telling how to contrive necessary food and shelter out of common materials found in a winter landscape.

THIRTY-SIXTH ANNUAL REPORT OF THE NA-TIONAL ADVISORY COMMITTEE FOR AERONAU-TICS 1950-Jerome C. Hunsaker, Chairman-Govt. Printing Office, 977 p., illus., \$7.25. Includes a number of research reports and a general account of work during the year.

WATER FOR PEOPLE-Sarah R. Riedman-Schuman, 151 p., illus., \$2.50. The story, told for children, of what water is and does from the first rain to modern rainmaking.

YOUR PRECIOUS EYESIGHT: A Concise and Comprehensive Anthology of Questions and Answers-L. Lester Beacher-Psychological Library, 84 p., \$3.00. Information for the layman about eye defects, use of glasses, eye exercises, viewing television, eye diseases and contact lenses.

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