• Books of the Week •

THE ADVANCEMENT OF SCIENCE, Vol. III, No. 9—*British Association for the Advancement of Science,* 95 p., paper, 5 shillings.

ANIMAL PATHOLOGY—Russell A. Runnells—*Collegiate Press,* 594 p., illus., $6.00, 3rd ed.

CLIPPER SHIP MEN — Alexander Laing — *Duell,* 279 p., illus., $3.00.

THE CONTROL OF GERMANY AND JAPAN—Harold G. Moulton and Louis Marlio—*Brookings,* 116 p., $2.

DOGS AT WAR—Clayton G. Going—*Macmillan,* 179 p. illus., $2.50.

DROUGHT IN THE UNITED STATES ANALYZED BY MEANS OF THE THEORY OF PROBABILITY—George Blumenstock, Jr.—*U. S. Dept. of Agric.,* illus., 15c.

ENGLISH-SPANISH COMPREHENSIVE TECHNICAL DICTIONARY—Lewis L. Sell, comp.—*McGraw,* 1477 p., $30.

GENERAL CHEMISTRY—John Arrend Timm—*McGraw,* 692 p., illus., $3.75.

GEORGE CARVER, BOY SCIENTIST—Augusta Stevenson—*Bobbs,* 202 p., illus., $1.50.

JOSEPH LISTER, FATHER OF MODERN SURGERY—Rhoda Truax—*Bobbs,* 287 p., illus., $3.50.

THE MICROSCOPE—R. M. Allen—*Van Nostrand,* 286 p., illus., $3.00.

NEUROLOGY OF THE EYE, EAR, NOSE, AND THROAT—E. A. Spiegel and I. Sommer—*Grune,* 267 p., illus., $7.50.

NORMAL LIVES FOR THE DISABLED—Edna Yost—*Macmillan,* 298 p., $2.50.

OUR ARMY AT WAR, THE STORY OF AMERICAN CAMPAIGNS IN WORLD WAR II TOLD IN OFFICIAL WAR DEPARTMENT PHOTOGRAPHS—*Harper,* $3.00. (An introduction by General George C. Marshall.)

PHYSICAL GROWTH AND DEVELOPMENT—Katherine Simmons—*National Research Council,* 87 p., paper, $1.25. (Monograph, vol. IX, no. 1.)

THE SMITHSONIAN INSTITUTION, ANNUAL REPORT OF THE BOARD OF REGENTS, 1943—*U. S. Gov. Print. Off.* 609 p., $2.00.

WE BUILD, WE FIGHT!—Hugh B. Cave—*Harper,* 222 p., illus., $2.50.

THE WOLVES OF MOUNT MCKINLEY—Adolph Murie—*Gov. Print. Off.,* 238 p., paper, 40c, National Parks of the United States, Fauna Series no. 5.

Science News Letter, October 28, 1944

MEDICINE

Synthetic Riboflavin

➤ RIBOFLAVIN, one of the B vitamins, is synthesized by bacteria in the human intestinal tract, an experiment conducted in Baltimore by Drs. Victor A. Najjar, George A. Johns, George C. Medairy, Gertrude Fleischmann and L. Emmett Holt, Jr., disclosed.

Their findings cast doubt on the high and universal requirement for riboflavin that has previously been accepted, they state in reporting the experiment (*Journal, American Medical Association,* Oct. 7).

Twelve boys between ten and sixteen years old were the subjects of the experiment. They lived for 12 weeks on an experimental diet of purified vitamin-free foods. A vitamin mixture was given them separately, but it contained no riboflavin. The only riboflavin they got was a minute amount—between 70 and 90 micrograms daily—which occurred in casein that was supposed to be vitamin free.

Yet, despite this low intake of riboflavin, the body wastes were found to contain five to six times as much as was taken in the food—a fact that could be explained only by the production of riboflavin by the intestinal bacteria. Giving them succinylsulfathiazole, which checks the production of thiamin by intestinal bacteria, had practically no effect on the production of riboflavin.

During the three months of the experiment, the boys remained in excellent health except for one who developed a Vincent's stomatitis during the second week. This cleared up, however, without the boy's taking any riboflavin.

It has been known previously that riboflavin is manufactured in the intestines of rats and ruminant animals, but it had not been previously demonstrated that it occurs also in humans, he investigators state.

Further experiments are planned to determine whether it is necessary to take a small amount of riboflavin in order to start the manufacturing process in operation.

Science News Letter, October 28, 1944

NUTRITION

Coffee, Tea and Beer Can All Contribute Vitamins

➤ COFFEE, tea, beer and beverages made from meat extracts can all contribute vitamins to the diet, it appears from studies that have been reported, (*Nutrition Reviews,* September).

Beer, studies made in England showed, supplies riboflavin and niacin, the latter the pellagra-preventing vitamin. Both are members of the vitamin B group.

A little over half a pint of one of the beers tested would furnish almost half the daily requirement of niacin and 15 to 30% of the riboflavin.

The malt that goes into the beer contains large amounts of both vitamins which means, it is pointed out, that malt products may be of importance as ingredients of bread and breakfast foods.

Whether they drink beer or not, the English get some riboflavin from their daily tea and Americans get some niacin from their daily coffee. Dr. W. H. Sebrell, of the U. S. Public Health Service, found that tea contains appreciable amounts of riboflavin. English scientists report figures showing that a cup of tea contains about 10 micrograms. This is one two-hundredth of the daily requirement of riboflavin.

Coffee, American scientists have reported, contains some niacin. The amount in the average cup of coffee as dispensed in various restaurants is about one milligram, which is one-hundredth of the minimum daily requirement.

Commercial meat extracts are rich in both riboflavin and niacin. A cup would provide on the average about one-tenth of the daily recommended ration of riboflavin and seven of the 10 milligrams generally set as the minimum daily requirement of niacin. The high niacin content, it is suggested, may have something to do with the reputation meat extracts have as stimulants.

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