Further information may be obtained from Professor Howard B. Lewis, Department of Biological Chemistry, Medical School, University of Michigan, Ann Arbor.

FIVE tuition-free courses in higher mathematics, open to graduate students and approved by the United States Office of Education, will be offered in the evenings beginning on June 12 in the New York University College of Engineering at University Heights. The program will include advanced methods of applied mathematics, fluid dynamics and applications, theory of elastic plates, electrical network theory and a seminar on vibrations. Applications may be made to the college, Room 204, Bliss Building, University Heights. Applicants must have a bachelor of science degree and several years of graduate instruction in mathematics or physics. The tuition and expenses of the courses will be paid by the Office of Education from a congressional grant of $9,000,000 for engineering defense courses.

DISCUSSION

NUTRITIONAL PROBLEMS OF NATIONAL DEFENSE

AT the recent symposium conducted by the Chicago Branch of the American Association of Scientific Workers, a group of scientists gathered from all over the country heard three eminent authorities in the field of nutrition describe the pressing nutritional problems of our national defense and a method of meeting them. At the meeting, held the evening before the convening of the Federation of American Societies for Experimental Biology, Dr. Hazel Stiebeling, senior food economist of he U. S. Department of Agriculture, disclosed that, according to the latest figures available, fully 50 per cent. of the nation's children are being raised on inadequate food allotments. That this weakness must inevitably be felt in any attempt to forge a strong defense for this nation, and that its correction could not be prosecuted too strongly, were vigorously emphasized by Dr. Stiebeling. She clearly pointed out that the workers and soldiers of to-day had been brought up among just such conditions and that those who will replace them—the youth of to-day—must have improved nutritional conditions to be maximally effective in the work to be done. Dr. Stiebeling showed how improvement in economic status and purchasing power is a prime requisite which, in part, is being met by the government's surplus commodities and food stamp program. However, it was stressed that this must be coupled with a far-reaching educational program to influence best nutritional utilization of each dollar spent. "We need," said Dr. Stiebeling in summary, "immediate action on a broad front by many agencies if nutrition is to play its necessary part in national defense."

Colonel Paul E. Howe, of the Sanitary Corps, outlined the set-up by which the army is now being fed, and he emphasized the improvement that modern attitudes have wrought in the army diet. Allotment of a certain amount of money for food per day is not enough, and now for the first time the army is required specifically to prepare a ration that is nutritionally balanced.

Dr. Russell Wilder, of the Mayo Clinic, gave the third talk, "Nutrition in the United States—A Plan for the Future," in which he emphasized again the need for nutritional adequacy. He cited specific results of research at the Mayo Clinic, revealing drastic personality degeneration and working inefficiency which were caused by B_1 deficiency and which became increasingly difficult to clear up as the duration of deficiency was prolonged. He mentioned the susceptibility of large populations to great pandemics when nutrition is impaired, as in the last war, and he specifically cited the large loss of sight among Danish children when the Danish butter, and with it the vitamin A supply, was exported to Germany. Dr. Wilder stated that particularly in the last sixty years, because of the use of milled white flour and purified white sugar, the diet of the average American has been in a worse nutritional state than at any time previously. He stated that for success in national defense "the time element is of extreme importance—as much in human values as in mechanical ones." Because education is of necessity such a slow process, requiring a time lapse before results appear, Dr. Wilder based his plan for the immediate nutritional future of America on three major and feasible procedures. First, he proposed that the wheat milling processes be modified to include the greatest possible vitamin content. (This, as a result of his committee's suggestion, is actually already being carried out.) Secondly he proposed that to all refined sugar there be added 20 per cent. of its weight of skimmed milk solids—an excellent and relatively cheap source of needed vitamins and minerals. Third, he suggested that the only remaining deficiency should be overcome by supplying vitamin C as citrus fruit or concentrates thereof.

In these three talks we have, for what we believe the first time, been given a clear picture of just what the nutritional needs of the country are; and, in addition, we have been given a method of action to meet these needs within a finite time and by workable means.

ALBERT M. POTTS

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