## The New Degree in Nutrition

By Alice M. Copping, Department of Physiology, Queen Elizabeth College, London, W.8

The Michaelmas term in 1953 at Queen Elizabeth College, University of London, will see the beginning of a course, that will prepare students for the new University of London degree of B.Sc. (Nutrition). There is at present no other first degree in nutrition offered in Great Britain, and under the wide nutrition teaching system of the United States it is commoner to take postgraduate training in nutrition than to take the subject as a 'major' for B.S. In one of the most famous schools of nutrition in the world, at Cornell University, Ithaca, N.Y., students who have already graduated in suitable subjects may take postgraduate courses in special aspects of nutrition and prepare themselves for a Master's degree. As far as we know, similar plans of study apply in many other schools of nutrition in the United States; in other countries the study of nutrition is attached to physiology and biochemistry or to medicine.

We are thus setting out on a pioneering journey with those students who begin their studies in October 1953 and opt for the nutrition degree. It is, perhaps, necessary to explain that in the past King's College of Household and Social Science, this college's name until January 1953, has prepared students for B.Sc. (H. & S.S.) by a training in physiology and applied chemistry well suited as background for the concentrated course in nutrition given at present to those aiming at the University of London postgraduate diploma in dietetics. There will, under the new regulations, be a degree of B.Sc. (Household Science), a development of the previous degree of B.Sc. (H. & S.S.) and similar in scope, as well as the new B.Sc. (Nutrition), so that the tradition of the College will still be maintained in teaching the scientific principles underlying the practice of the domestic arts and students may still proceed to the Diploma in Dietetics.

Under the provisions of the outline syllabus at present available, the courses for B.Sc. (Nutrition) and B.Sc. (Household Science) are to cover 3 years' study after the intermediate examination. Students who have not been able to pass the advanced level General Certificate of Education, or the intermediate or an equivalent examination, in suitable subjects at school will be offered a preliminary year of training in these pre-requisite subjects, which are chemistry, physics and biology or zoology.

During the 1st year of the two degrees the courses of study are similar and include biology, chemistry, physics and social studies. These four subjects provide the essential background to a knowledge of physiology and nutrition, and it is important to have among the introductory studies an outline of social history, social economics, including economic institutions and public finance, and the social services and their administration.

In the 2nd year the course in chemistry is to be extended and the study of physiology and nutrition begun. At this stage the proposed weekly allowance of

hours of study is 8 for chemistry, 10 for physiology and 6 for nutrition, that is, 200, 250 and 150 hours per session, respectively. In physiology fundamental study of the whole subject will be begun in the 2nd year and continued through the last 2 years of the course, with special attention to chemical physiology in the final year. In nutrition it is proposed that the 2nd-year student shall begin with a thorough training in the preparation of food and the composition of foodstuffs. Then in the last year of the course, when the greater part of the time is given to nutrition, the subjects covered will be plants and animals that contribute to the production of food; functions of nutrients and the effects of deficiency; chemical, biological and microbiological methods of estimating nutrients; formulation of dietaries; methods of dietary survey and assessment of nutritional status; nutrition and metabolism of micro-organisms; food hygiene, food preservation and food spoilage; economic and sociological aspects of food production and consumption. A short course in statistics will be included.

This account has tried to indicate the wide field to be covered if students are to acquire the label B.Sc. (Nutrition) with a state of knowledge adequate for their immediate absorption into laboratories doing food research or into nutrition research teams taking part in laboratory or field work. It is important for the student of nutrition to realize the psychological and economic as well as the physiological factors involved in the problem of adequate nutrition and that the subject in fact offers world-wide scope for study and advancement of knowledge. Nutrition must be taken to include not only the nutrition of man, but also the closely related nutrition of plants, animals and micro-organisms. Only by giving as wide a training as possible in the available time can we justify our own faith in this new degree and send out graduates in nutrition who will be useful members of society in a world that has an ever growing problem of feeding its hungry populations.

## **Education in Animal Nutrition**

By J. HAMMOND, School of Agriculture, University of Cambridge

In order to meet the ever-changing needs of teaching in animal nutrition it must be based on active and well organized research dealing with current problems in the subject. Thus before the war we were well supplied with high-protein feedingstuffs, such as oilcakes, while now we have to supply the majority of our feedingstuffs from our own farms to produce a much greater volume of milk than before the war. It is necessary, therefore, to consider briefly the position of organized research on the subject.

## Research Institutes

About 1911 three Research Institutes in Animal Nutrition were set up in conjunction with the Departments of Agriculture at the Universities of Aberdeen,