SOME ASPECTS OF THE FOOD PROBLEM IN CANADIAN MILITARY HOSPITALS IN ENGLAND.

By I. D. Carson, Honorary Major, C.A.M.C.;

Officer-in-Charge, Food Supply Administration; Staff of the D.G.M.S., O.M.F.C.

The problem of administering food supplies in military institutions is, at the present time, beset by three main difficulties:—

(*a*) The provision of an attractive variety of balanced diets affording ample nutrition without waste, based on

(*b*) The utilization of such food-stuffs as may be found readily available after release by the Ministry of Food, and

(*c*) The reduction in the consumption of imported food-stuffs now being placed on the British market in limited quantities under traffic arrangements, controlled by the Ministry of Shipping.

In order to meet this situation numerous changes have been necessary, from time to time, in the methods employed in assembling and administering raw food-stuffs.

Historical.

The problem of feeding Canadian patients in military hospitals in this country first presented itself in 1915. At that time there was no centralized control of the purchasing of food; nor was there any definite limit placed upon the quantities of food-stuffs which might be issued by Canadian hospitals for the dieting of patients. In a broad way issues were restricted to the quantities laid down in Regulations for the Allowances of the Army, and supplies were purchased locally by the hospital authorities at the best rates that could be obtained in nearby markets.

The institutions then in operation at Taplow, Bromley, and Monks Horton purchased such supplies as were deemed necessary, and forwarded tradesmen's accounts, at the month end, direct to the Chief Paymaster, by whom the bills were paid. This procedure continued in force until the end of 1915, when a Hospital Supply Department was established at Shorncliffe, under the supervision of the Director of Supplies and Transport. At the same time a Purchasing Department was set up, and these two departments, with the active co-operation of the Medical Service, devised a system for the centralized control of food purchases. In consequence the privilege of purchasing food-stuffs in local markets was either withdrawn or greatly limited, and from the beginning of 1916 hospitals obtained the necessary supplies in part from the nearest Army Service Corps Depot, whether British or Canadian, and in part from the food supply warehouse established at Shorncliffe.

During this period officers in charge of hospitals were encouraged in the economical administration of food; but no control was exerted by the Hospital Supply Department in so far as laying down scales of diets or supervising the conservation of waste was concerned.

In the early spring of 1917 the increasing difficulty of accumulating sufficient quantities of food by purchasing in the open market became acute, and beginning February 1, 1917, the entire supply of food-stuffs, with the exception of a few staple commodities, such as bread, meat, sugar, tea, bacon, and milk, became the responsibility of the Army Canteen Committee, an organization under War Office control, with powers of commandeering quantities up to the total visible supply of any food commodity urgently required for military purposes.

With some modification the Hospital Supply Department continued to supervise the administration of food supply machinery for hospitals. This department maintained a cost record of hospital dieting, but beyond calling attention to excessive cost made no effort to interfere with the administration of the food supplied once delivery had been accepted by the proper hospital authorities.

At the end of June, 1917, the duties of the Hospital Supply Department, in so far as accounting and the general supervision of supply administration were concerned, became a responsibility of the Medical Services. Provision was immediately made for a survey of the situation, with the result that a series of helpful, periodic inspections were begun, resulting, through the co-operation of hospital authorities, in a vast improvement in the efficient and economical administration of food supplies within the hospitals.

During the remainder of 1917 great improvement was effected in the cooking and serving of attractive diets, allowances still being governed by Army Regulations which had been more or less carefully followed since the beginning of the War. A series of weekly dietaries, based on Army Regulations, was periodically submitted by the hospitals, and the careful examination of these reports, with attendant criticism and discussion, resulted after a time in the standardization of an ordinary diet without a sudden drastic revision likely to disturb feeding arrangements in any hospital.

During 1917 and the early part of 1918 the problem of accumulating sufficient quantities of food-stuffs became more and more acute. The first step to meet this situation, in so far as the dieting of hospital patients was concerned, was taken by the British medical authorities, resulting in the promulgation of an Army Council Instruction (A.C.I. 159 of 1918).

Diet Scales.

Reduced minimum and maximum scales were made applicable to the feeding of patients in hospitals, and "in view of the urgency of the food problem" it was considered that food consumption could be regulated within the limit provided by these scales, below or above which it was not desired to go. The scales were as follows:—

TABLE I.

Reduced British Hospital Diet.

(Authority: Army Council Instruction No. 159 of 1918.)

Scales of quantities sufficient to feed 100 patients for one day.

Commodity	Scale A. (Minimum.) Lbs.	Protein grms.	Fat grms.	Carbo-Hydr. grms.	Calories	Scale B. (Maximum.) Lbs.	Protein grms.	Fat grms.	Carbo-Hydr. grms.	Calories
Meat	31·25	1,856·25	3,535·69	—	39,937	31·25	1,856·25	3,535·69	—	39,937
Fish	18·75	851·25	84·37	—	4,275	18·75	851·25	84·37	—	4,275
Bacon	12·50	537·50	3,402·50	—	33,850	12·50	537·50	3,402·50	—	33,850
Bread and Flour ...	69	2,451·24	147·93	17,056·80	81,361	75	2,664·40	160·80	18,540·00	88,436
Sugar	9	—	—	4,000·50	16,398	9·50	—	—	4,222·70	17,309
Edible fats (Margarine)	6·50	—	2,463·50	—	22,912	6·50	—	2,463·50	—	22,912
Potatoes	50	397·00	23·00	4,763·00	21,350	70	555·80	32·20	6,668·20	29,890
Fresh vegetables ...	25	86·25	17·00	452·50	2,375	35	120·75	23·80	633·50	3,325
Cocoa	1	90·66	117·86	192 80	2,258	1	90·66	117·86	192·80	2,258
Milk (pints)	80	1,468·80	1,619·20	2,144·00	30,000	130	2,386·80	2,631·20	3,484·00	48,750
Syrup and Jam ...	5	7·00	—	1,567·00	6,450	5	7·00	—	1,567·00	6,450
Cereals	7	354·20	60·90	2,354·10	11,669	20	1,012·00	174·00	6,726·00	33,340
Eggs (number) ...	40	204·00	162·00	—	2,340	50	255·00	202·50	—	2,925
Tea and Coffee ...	1·50	—	—	—	—	2	—	—	—	—
Cheese	3	340·20	408·00	33·90	5,331	3	340·20	408·00	33·90	5,331
Total		8,644·35	12,041·95	32,564·60	280,506		10,677·61	13,236·42	42,068·10	338,988
Average per capita		86·44	120·42	325·65	2,805		106·78	132·36	420·68	3,390

An endeavour was made to apply these scales of diet to patients in Canadian hospitals. The instruction issued by the Army Council was a complete departure from regulations which had previously been in force. Instead of considering the individual requirements of each patient in drawing up a scale of issues, it was held that, in the feeding of sick men, the average requirements of large numbers furnished a safer basis of computation. Carrying out this idea allow-