

IMPROVING THE FEEDING OF THE AUSTRALIAN DEFENCE FORCE

C.H. FORBES-EWAN

The Australian Army and Air Force are fed according to a set of nutritionally - based ration scales, known as the Australian Defence Force Ration Scales (ADFRS). The Navy's basis of feeding is financial - a sum of money is available for each sailor to be fed.

After inevitable wastage of 10-15 % of available food (during preparation, food left on the servery and as plate waste), actual food intake from the basic scale of the ADFRS will be approximately 13,000 kJ per person per day. For soldiers and airmen undergoing arduous training, the Arduous Duties Supplement (ADS) allows for an additional intake of approximately 2,200 kJ. Similarly, officer cadets, and apprentices in the Army and Air Force receive an extra 1,200 kJ in the form of the Cadet/Apprentice Supplement (C/AS).

Morrissey et al. (1989) have shown that a typical soldier engaged in physically arduous training may expend up to 19,000 kJ per day; for Army apprentices, the mean result was over 14,000 kJ per day. Fat intakes of soldiers approached 40% of total energy intake. This contrasts with the long-term recommendation of the Better Health Commission (1986) that fat should provide about 33% of total energy.

As a result of these studies, the ADS and C/AS have been revised to provide more total energy, less fat and more complex carbohydrate. Future studies will determine the food requirements of sedentary service people to allow any necessary changes to be made to the basic scale of the ADFRS.

Our studies of the food requirements of sailors have shown that these also vary considerably. As examples, submariners, and sedentary sailors at a shore establishment expended about 12,000 kJ per person per day, while the corresponding result for sailors in a patrol boat during rough weather was 18,000 kJ. Fat provided up to 44% of the total energy intake of some groups of sailors. A nutritional basis of feeding has been proposed to Navy in an attempt to reduce fat intakes.

Efforts are also being made to promote changes in the diets of service people by altering the basic ration scale. For example, the daily scale for whole milk has been reduced from 550 ml to 500 ml and a new scale has been introduced: 'milk, reduced-fat' is now available at 600 ml. It is hoped that the availability of a greater volume of reduced-fat milk will encourage caterers to draw this in preference to whole milk. In addition, an education program is being devised. The aim will be to teach service people of all ranks the benefits of diets which are low in fat and rich in complex carbohydrate, and the importance of maintaining desirable weight.

Better Health Commission (1986). Looking forward to better health, Vol 2. Better Health Commission. AGPS: Canberra.
MORRISSEY, B.L.L., FORBES-EWAN, C.H., WATERS, D.R. and GREGG, G.C. (1989). Proc. Nutr. Soc. Aust. 14:151.

Materials Research Laboratory - Tasmania, Defence Science and Technology Organisation, Scottsdale, Tasmania 7260