

## A NUTRITIONAL EVALUATION OF THE AUSTRALIAN DEFENCE FORCE RATION SCALE

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The ration scales constitute the authority for provisioning foods for Australian soldiers and airmen. The impetus for the development of the revised scale, the Australian Defence Force Ration Scale (ADFRS), was the metrication of previous sundry scales in Imperial units. This led not only to a single flexible scale applicable to most of the likely Service feeding situations, but also allowed a much sounder nutritional approach to this task.

Food may be issued on either a daily or a meal basis. The scale comprises 18 basic ration items grouped into the 7 food groups in Table 1. Various alternatives are provided for each basic item, allowing variety in the diet and flexibility in supply. To avoid too drastic a departure from the previous feeding practices, the "rounded" metricated values of the basic items were preserved in the ADFRS. Using food composition tables, the issues of alternative items were adjusted wherever practicable on isoenergetic principles, although constraints such as costs and catering needs caused some departures from this approach. The energy and nutrient values of the ADFRS, based on the maximum scales of issue, are shown in Tables 1 and 2 respectively.

TABLE 1. Comparison of energy available per person daily (kJ).

Food Group	ADFRS (range)	Australian Population
Milk products and eggs	2103-2331	1716
Meat, poultry and fish	1147-7111	2916
Fruit and vegetables	1699-3137	1016
Cereal products	3110-5053	3236
Fats	2445-2809	1335
Sugar and jams	689-1587	2438
Beverages	9-1604	23
Total	11210-23682	12680

TABLE 2. Comparison of average nutrients available per person daily.

	Energy	Protein	Calcium	Iron	Retinol Activity	Thiamin	Riboflavin	Niacin Equiv.	Ascorbic Acid
	kJ	g	mg	mg	ug	mg	mg	mg	mg
ADFRS	17424	144	1365	26	2951	2.3	3.6	34.3	179
NHMRC	13200	70	800	10	750	1.1	1.4	18	30

The target figure of about 17000kJ was reached by providing for grade 2 activity (NHMRC, 1979) after allowing for preparation, serving and plate waste. Additionally, supplements are available for special purposes.

ABS (1979) "Apparent consumption of foodstuffs and nutrients Australia 1977-78". (Australian Bureau of Statistics : Canberra).

NHMRC (1979) "Dietary allowances for use in Australia". (AGPS Canberra).

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