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A matter of concern ¹

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DEAR EDITOR,

It came as no surprise to Australian health professionals when, at the 9th International Congress On Obesity, Professor Philip James, chairman of the International Obesity Task Force, stated that many of the risks for cancer, diabetes and other diseases related to excess weight are much greater than previously thought and that childhood obesity is out of control.¹

Those of us responsible for the health care of Military personnel will be aware of the constant battle to keep obese members of the Australian Defence Force (ADF), especially those with injuries to lower limb joints, fit for individual readiness and deployment.

Then we read in the New England Journal of Medicine that researchers, in an analysis from the Framingham Study over a 14 year period, who were seeking to clarify the relationship between obesity and heart failure, found obesity to be independently responsible for 14% of heart failure cases in women and 11% of cases in men.²

So it is a matter of concern to me that, in the course of performing routine medical examinations on Australian Defence Force Academy (ADFA) cadets, particularly those applying for flying training, I have noticed an incidence of cholesterol levels which seems high for this young age group (usually 18-22 years).

Out of 106 Cadets, 21 had serum cholesterol levels greater than 5 mmol 1litre and 6 were 4.84+ mmoVlitre. 4 of the 21 were RAAF cadets and of these, half had cholesterol levels which had increased while they were at ADFA. This data was acquired using MIRMER, the RAAF electronic database.

On cholesterol levels alone, assuming 5 mmoVlitre is high in such a young group, questions arise which may need ADF attention. If diet is mainly responsible, is it because cadets elect to eat an unsatisfactory diet or are the diet provided an unsatisfactory one? Studies have shown that raised cholesterol levels in young men have an adverse effect on morbidity from coronary heart disease (CHD) and cardiovascular disease (CVD) later in life.

If it is postulated that a 20-year-old with a raised cholesterol (5 mmol 1litre +) may develop CHD or CVD at 40 years if it is not checked, this latter time is when he (or she) is likely to be most productive for the ADF. If it is further postulated that if such persons are pilots or aircrew, they are likely to be "grounded", possibly permanently and their acquired skills lost to the ADF, irrespective of Service.

Since the cost of training pilots to operational standards is of the order of \$6 million, replacement of such lost operators is very expensive. Alternatively providing a daily reductase inhibitor such as atorvastatin over 20 years would cost at least \$10,000, if such a drug were compatible with military flying. Cost-effective perhaps but is it morally defensible if a modified life-style is more effective and cheaper.

In terms of "duty-of-care", what would be the ADF position if several members suffered CHD or CVD and claimed it was due to the poor diet provided or learned during training and continued habitually? A class-action could be very expensive, not to say embarrassing.

Do we in the ADF need to study this problem, using epidemiological principles, to determine risk factors, outcomes and effectiveness of resource management for example? Is there a need for the education of cadets to include information on the long term effects on the body of what we eat and drink and how our diet can affect our fitness and efficiency? Should we also monitor the food provided to cadets by caterers for good dietary practices by them?

Poor or inappropriate nutrition can undermine the efficiency and long service of ADF members.

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