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Associations between eating ‘style’ and dietary behaviour in military personnel: preliminary findings from the UK armed forces

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The Armed Forces are not exempt from wider UK societal trends of increasing prevalence of overweight and obesity. Unhealthy body weight adversely impacts on physical and mental health, and in the military is associated with reduced physical fitness, increased risk of injury, and reduced deployability^(1–2). Overweight and obesity represent complex and multi-faceted challenges, but maintaining a healthy body weight might be influenced by eating styles (i.e. why people eat and/ or overeat).

The aim of this study was to investigate whether eating style (uncontrolled, restrained, emotional and external) was associated with dietary choice (behaviour) in a sample of military personnel. The identification of dominant eating styles and subsequent food intake is important to identify since it could be used by health professionals to inform dietary therapy, promoting healthy weight maintenance.

The population used in this study was a sample (n 123) of military personnel. Questionnaires detailing demographics and eating style were administered in conjunction with a four-day food diary (n 101), to identify eating style and dietary choice. Seven food groups of interest were identified; fruit and vegetables, sweet foods (e.g. sweet pastries, cakes, biscuits, puddings, custard and confectionary), savoury snacks, energy-dense savoury meals, meat products, sugary soft drinks and alcohol. Data were analysed using SPSS 23 software package; descriptive statistics were determined, and multiple regression analyses were performed where significant correlations were identified.

The sample (n 79 male; n 44 female) comprised 42 Officers, 35 Senior Rates and 46 Junior Rates. The mean (SD) age was 36.5 (9.7) years, median (interquartile range, IQR) height was 1.76 (0.16) m, mean body mass was 82.1 (15.5) kg, mean waist circumference was 87 (12) cm and mean body mass index (BMI) was 26.9 (3.7) kg.m⁻².

There were significant associations between: uncontrolled eating and savoury snacks and uncontrolled eating with sweet foods ($P < 0.05$; $r = 0.20$); restrained eating and energy-dense savoury meals ($P < 0.03$; $r = -0.30$); emotional eating and sweet foods ($P < 0.002$; $r = 0.30$); emotional eating and energy-dense savoury meals ($P < 0.044$; $r = -0.20$); external eating and sweet foods ($P < 0.002$ and $r = 0.31$); and external eating and sugary soft drinks ($P < 0.004$; $r = 0.20$). However, when other variables were controlled (i.e. age, gender, education and rank), food group choice (i.e. eating behaviour) could not be predicted from an individual's preferred eating style. There was a positive correlation between restrained eating and BMI ($P < 0.006$; $r = 0.25$), where 13.3 % of the variance in BMI could be accounted for by a restrained eating preference.

These preliminary observations provide tentative associations between eating styles and “less healthy” dietary choices. Awareness of these preferences in an individual could inform dietary behaviour change to support healthy weight management. Further research in a larger military cohort is certainly warranted.

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1. Kyrolainen H, Hakkinen K, Kautiainen H *et al.* (2008) *Occupational Medicine* **58**, 251–256.
2. Blacker SK, Wilkinson DM, Bilzon JL *et al.* (2008) *Military Medicine* **173**, 278–286.