

ORIGINAL COMMUNICATION

The Adolescent Food Habits Checklist: reliability and validity of a measure of healthy eating behaviour in adolescents

F Johnson¹, J Wardle^{1*} and J Griffith¹

¹ICRF Health Behaviour Unit, UCL, UCL, Gower Street, London, UK

Objective: To assess the reliability and validity of the Adolescent Food Habits Checklist (AFHC), a measure of healthy eating behaviour in adolescents.

Design: A cross-sectional study of 1,000 adolescents aged 11-16 years in London, UK. The AFHC was compared with a food frequency questionnaire (FFQ) and a 24-hour dietary recall.

Setting: The study was conducted in a secondary school in London, UK.

Subjects: 1,000 adolescents aged 11-16 years in London, UK.

Results: The AFHC showed good reliability and validity compared with the FFQ and 24-hour dietary recall.

Conclusions: The AFHC is a reliable and valid measure of healthy eating behaviour in adolescents.

Sponsorship: The study was funded by the ICRF Health Behaviour Unit.

J Hum Nutr Diet 2006; **19**: 56-62. doi: 10.1111/j.1365-3010.2005.01561.x

Keywords: adolescents, food habits, checklist, reliability, validity

Introduction

The eating behaviour of young people has come increasingly under the spotlight in recent years amid claims that many adolescents in Western countries have a poor diet (Anderson *et al*, 1994; Neumark-Sztainer *et al*, 1998; Cavadini *et al*, 2000). Particular areas of concern have included high levels of dietary fat (Crawley, 1993) and a low fruit and vegetable intake (Hurson & Corish, 1997; Prescott-Clarke & Primatesta,

1998). In the light of these concerns there has been an interest in novel approaches to measurement of the diet and eating behaviour of young people. Most instruments focus on nutrient intake, which has been measured using various methods of dietary recall, dietary records and food frequency questionnaires (Crawley & While, 1996; Milligan *et al*, 1998; Samuelson *et al*, 1996; Devaney *et al*, 1995). These approaches have been shown to have reasonable levels of validity and reliability (Sjoden *et al*, 1986; Hann *et al*, 2001) and may provide appropriate methods for the examination of outcomes related to the effects of dietary intake or to studies of the nutritional status of young people. However, where the research interest is in food-related behaviours and attitudes, and predicting or influencing levels of involvement in healthy eating practices, then an approach more linked to patterns of behaviour may be fruitful.

Variation in young people's dietary intake is likely to reflect foods available and the values and circumstances of parents, school and peers, as much as the adolescents' own motivations (Adams, 1997; Feunekes *et al*, 1998; Lytle *et al*,

*Correspondence: J Wardle, ICRF Health Behaviour Unit, Department of Epidemiology and Public Health, University College London, Gower Street, London WC1E 6BT, UK.

1811) = 49.0, $P < 0.001$), and consumed more fruit and vegetables ($F(1, 1818) = 10.1$, $P < 0.01$). Higher levels of dietary restraint ($F(1, 1812) = 218.8$, $P < 0.001$) and nutrition knowledge ($F(1, 1590) = 9.5$, $P < 0.01$) were also associated with being female.

To examine convergent validity, correlations between AFHC and the other variables were calculated (Table 3). As predicted, among both boys and girls a strong negative correlation was observed between AFHC score and levels of dietary fat. Similarly, daily fruit and vegetable intake and AFHC score was strongly associated for both sexes. The correlation with dietary fibre was less strong but still highly signifi

Lytle LA, Stone EJ, Nichaman MZ, Perry CL, Montgomery DH, Nicklas TA *et al* (1996): Changes in nutrient intakes of elementary school children following a school-based intervention: results of the CATCH study. *Pe . Med.* 25, 465–477.

Margetts BM, Thompson RL, Speller V & McVey D (1998): Factors which infl