Summer Meeting, 28 June-1 July 2010, Nutrition and health: cell to community

The role of well-being and food involvement in determining the dietary quality of disadvantaged women

M. Jarman, G. Ntani, W. Lawrence, J. Baird, M. Barker and The Food Choice Group MRC Epidemiology Resource Centre, University of Southampton, Southampton SO16 6YD, UK

Women who are disadvantaged by leaving school with a few or no qualifications eat a less balanced and poorer-quality diet than women with qualifications⁽¹⁾. Our previous research suggests that women of lower educational attainment (LEA) also have lower levels of food involvement⁽²⁾. Food involvement summarises the priority someone gives to food from its acquisition through to its disposal and is assessed using a validated questionnaire⁽³⁾. Our qualitative data suggest that women of LEA may have lower food involvement because they value themselves too little to spend time and effort preparing food for themselves⁽⁴⁾. This contrasts with women of higher educational attainment (HEA) who appear to place a higher priority on feeding themselves good food. We do not know whether poorer well-being of women of LEA is directly associated with having a poorer-quality diet. We therefore set out to answer two questions: (1) are there differences in well-being in women of LEA and women of HEA and are these differences associated with differences in food involvement in women of LEA and HEA? (2) Do differences in well-being and food involvement explain differences in the dietary quality between women of LEA and HEA?

We conducted a cross-sectional survey assessing educational attainment, food involvement, well-being and quality of diet⁽⁵⁾ in 1022 women attending Sure Start Children's Centres and baby clinics in Hampshire, UK. Validated assessment measures were used.

	LEA (n 429)	HEA (n 588)	P-value
Age at interview (mean (sD))	29.4 (6.4)	31.5 (5.5)	< 0.001
Number of children living at home (median (IQR))	2 (1-3)	1 (1–2)	< 0.001
Prudent diet score (mean (sD))	-0.2 (1.5)	0.9 (1.5)	< 0.001
Food involvement score (mean (sD))	43.3 (4.9)	45 (4.9)	< 0.001
Well-being score (mean (SD))	12.2 (5.5)	14.0 (5.0)	< 0.001

We found significant differences in well-being, food involvement and quality of diet between women of LEA and HEA (see Table showing participant characteristics by educational attainment). After adjusting for educational attainment, we found that women with a poorer sense of well-being tended to report lower food involvement (β = 0.2, P<0.001). We also found well-being and food involvement to predict the quality of diet. After adjusting for confounders, and in addition to the effect of educational attainment, women who had poorer well-being and lower food involvement tended to have poorer-quality diets (well-being β = 0.04, P<0.001; food involvement β = 0.05, P<0.001).

We have established that women of LEA tend to have poorer well-being and lower food involvement than women of HEA, and that these characteristics have independent effects on the quality of women's diets. Our data suggest that any intervention to improve the quality of the diet of disadvantaged women would have also to address their sense of well-being and raise the priority they give to food.

- 1. Robinson SM, Crozier SR, Borland SE *et al.* (2004) Impact of educational attainment on the quality of young women's diets. *Eur J Clin Nutr* **58**, 1147–1180
- 2. Barker M, Lawrence W, Skinner T *et al.* (2007) Women of lower educational attainment have lower food involvement and eat less fruit and vegetables. *Appetite* **50**, 464–468.
- 3. Bell R & Marshall D. (2002) The construct of food involvement in behavioural research: scale development and validation. Appetite 40, 235-244.
- 4. Jarman M, Pease AS, Lawrence W et al. (2010) Why do women of lower educational attainment have lower food involvement than women of higher educational attainment? Proc Nutr Soc 69, (OCE1), E43
- 5. Crozier S, Inskip H, Barker M et al. (2009) Development of a 20-item food frequency questionnaire to assess a 'prudent' dietary pattern among young women in Southampton. Eur J Clin Nutr 1, 1–6.