The association between fat intake and self-efficacy depends on the value placed on health

CM Tighe 1, DR Woodward 2, PJ Ball 1

¹ Department of Psychology, University of Tasmania, Hobart, TAS 7001

Self-efficacy - the belief that one is capable of achieving a specified outcome - has been explored by several studies in relation to diet. One might reasonably hypothesise, however, that its impact on healthy dietary behaviour will depend on the value a person places on health itself. We report here an exploration of the interaction between self-efficacy and the value placed on health, in relation to fat intakes.

The 256 subjects included 64 university students, 67 unemployed adults enrolled in a Skillshare programme, and 125 other adults of diverse backgrounds recruited from Hobart and surrounding areas. Each completed the 'short fat questionnaire' (1), which provides a fat intake score reflecting the fat/energy ratio of the respondent's usual diet. They also filled in the 'reducing fat' self-efficacy scale (2), and a locally-developed unpublished 10-item health value scale; these two scales showed a correlation coefficient of 0.09 (P=0.15).

In regression analysis using the whole sample, the self-efficacy score proved a strong predictor of the fat intake score, stronger self-efficacy resulting in a lower intake score; the standardised regression coefficient for self-efficacy was -0.26 (P<0.0001), and the equation explained 7% of the variation in fat intake. Addition of health value to the equation marginally increased the proportion of variation explained to 8%. When demographic predictors were also added to the equation, the proportion of variation explained rose to 12%, but the regression coefficient for self-efficacy was only marginally different at -0.24 (P=0.0002).

For subsequent analyses, a median split was applied to divide the sample in two groups, placing 'lower' and 'higher' value on health, and the above regressions were repeated for each group separately. For the 'lower' group, the self-efficacy regression coefficient was only -0.14 (P=0.10), becoming -0.15 (P=0.11) after adjustment for health value and demographic factors. For the 'higher' group, it was -0.41 (P<0.0001), becoming -0.39 (P=0.0001) after these adjustments.

These results suggest that enhancing self-efficacy in relation to fat intake is unlikely to result in a low fat intake, unless the person also places a fairly high value on being healthy.

- 1. Dobson AJ, Blijevens R, Alexander HM, Croce N, Heller RF, Higginbotham N, Pike G, Plotkinoff R, Russell A, Walker R. Short fat questionnaire: a self-administered measure of fat-intake behaviour. Aust J Publ Health 1993;17:144-9.
- 2. Sallis JF, Pinski RB, Grossman RM, Patterson TL, Nader PR. The development of self-efficacy scales for health-related diet and exercise behaviours. Health Educ Res 1988;3:288-92.

² Division of Biochemistry, University of Tasmania, Hobart, TAS 7001