FACTORS ASSOCIATED WITH TEENAGERS' SNACK FOOD PREFERENCES

M.E. WOBMA, P.J. BALL* and D.R. WOODWARD**

As part of a larger study of how teenagers categorise foods, 197 Hobart senior secondary students (grades 11 and 12) were asked to arrange 26 specified snack foods (including beverages) in order of preference. The foods were chosen so as to cover a fairly wide range of fat, sugar and fibre contents. The best-liked snacks were (in decreasing order of preference) orange juice, salad rolls, chocolate and hot chips; the least liked was fruit cake, followed by wine and cracker biscuits.

To gain some insight into perceptions associated with these preferences, the students were asked to rate the foods on several descriptive scales. Each student was randomly allocated one of four subsets of food items to rate.

On a healthiness scale where 1 indicated 'healthy' and 5 'unhealthy', mean ratings for different food items ranged from 1.1 for apple to 4.4 for hot chips. On a popularity scale (1 = 'popular' to 5 = 'unpopular'), mean ratings ranged from 1.1 for hot chips to 3.7 for carrots. On a tastiness scale (1 = 'tasty' to 5 = 'untasty'), mean ratings for different food items ranged from 1.5 for orange juice to 3.4 for beer.

They were also asked to rate the snacks for their content of fat, sugar and fibre, using scales where 1 indicated low in the substance and 5 high in that substance. Mean ratings for fat content ranged from 1.1 for apple and carrot to 4.8 for hot chips. Mean ratings for sugar content ranged from 1.5 for salad roll to 4.8 for chocolate and Mars bars. Mean ratings for fibre content ranged from 1.8 for lemonade to 4.2 for salad rolls.

Preference ratings for some foods, and their ratings on some scales, differed significantly between boys and girls, and between smokers and non-smokers.

Multiple regression analysis was used to explore whether the mean preference rankings for the various snacks could be predicted from the snacks' mean scores on the six rating scales. The overall regression was highly significant ($P<0.001$), with 84% of the variation in mean preference rankings explained. The only significant predictor terms were tastiness and popularity, preference being given to items seen as tastier and healthier.

Boys and girls differed significantly ($P<0.05$) in their preference rankings, and ratings on the various scales, for certain foods. A gender difference was also found in the multiple regression analysis. Among girls, tastiness was the only significant predictor of preference rating, tastier foods being preferred. Among boys, all predictors - except perceived sugar content - were significant, with preference being given to foods seen as tastier, healthier, more popular, lower in fat and higher in fibre.

For smokers, only perceived popularity of a food was a significant predictor of its preference ranking, with preference given to foods seen as more popular. For non-smokers, perceived healthiness, tastiness, popularity, and fat content were all significant predictors: preference was given to foods seen as tastier, healthier, more popular, and lower in fat.

Landbouwuniversiteit, Wageningen, Netherlands.

* Psychology Department, University of Tasmania, Hobart, Tas 7001

** Biochemistry Department, University of Tasmania, Hobart, Tas 7001