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Age, sex & BMI are associated with different eating behaviour styles in Irish teens

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Abstract

The aim of this study was to determine the types of eating behaviours most common among Irish teenagers and to explore their association with age, sex and Body Mass Index (BMI). Eating behaviour data from the National Teenage Food Consumption Survey (NTFS1 2005/06 n = 441, m/f 224/217) were analysed. The Dutch Eating Behaviour Questionnaire (DEBQ) contains 33 items, which make up 3 scales: Restraint (DEBQ-Res, 10 items), Emotional (DEBQ-Em, 13 items), External (DEBQ-Ex, 10 items). All items are answered on a 5 point Likert scale. Descriptive statistics, non-parametric Wilcoxin-Mann-Whitney U tests and Kruskal-Wallis tests, one-way ANOVA with post-hoc Tukey analysis, and Spearman correlations were run to test associations between age, sex and BMI variables and the 3 DEBQ scales. Data were analysed for the full group and stratified by sex and age groups (13–14/15–17 years). BMI categories were determined using age and sex-specific IOTF cut-offs. Mean(SD) scores among the whole group were DEBQ-Ex = 2.83(0.72), DEBQ-Res = 1.79(0.84), DEBQ-Em = 1.84(0.79). Females scored higher than males on all 3 scales; DEBQ-Res $P < 0.001$, DEBQ-Em $P < 0.001$, DEBQ-Ex $P = 0.037$. Older teens scored significantly higher than younger teens on DEBQ-Em ($P < 0.001$) and DEBQ-Ex ($P = 0.005$). Scores were higher for older males compared with younger males on DEBQ-Em ($P = 0.009$) and DEBQ-Ex ($P = 0.017$), and for older females compared with younger females on DEBQ-Res ($P = 0.031$) and DEBQ-Em ($P = 0.001$). BMI was positively correlated with DEBQ-Res for both males ($r = 0.18$, $P = 0.007$) and females ($r = 0.337$, $P < 0.001$) and with DEBQ-Em for females ($r = 0.153$, $P = 0.026$). When comparing BMI categories, teens classified as overweight ($P < 0.001$) and obese ($P = 0.005$) scored higher on DEBQ-Res than normal-weight teens. Similar associations were observed when the sample was split by sex and by age group. Overall, Irish teens' eating behaviours are mostly influenced by external factors, such as the sight or smell of food, rather than by restrained eating or emotional cues for eating. However, not all teens respond to the same influences. Females respond more than males to emotional cues for eating. Older teens have higher scores than younger teens on all scales. BMI is mostly associated with restrained eating, which is consistent with other literature suggesting that heavier teens are more aware of what they are eating and make focussed food choices to prevent weight gain. When targeting food choice messages to teens, a "one-size-fits-all" model may not be appropriate. Multiple factors, including age, sex and BMI differences, should be considered in order to encourage a positive change in eating behaviours.

Conflict of Interest

There is no conflict of interest