

Intakes and sources of dietary fibre in a nationally representative sample of teenagers (13–18 years) in Ireland

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Dietary fibre (DF) plays a major role in normal bowel function and adequate intakes are important across the lifecycle to prevent chronic conditions such as constipation. Data from the National Teens' Food Survey (NTFS) (2005-06) (www.iuna.net) over 15 years ago in Ireland have shown low intakes of DF in Irish teenagers (16g/d)⁽¹⁾ which is in keeping with findings from other European countries⁽²⁾. This study aimed to use new data provided from the NTFS II (2019-20) to estimate current intake and sources of DF for teenagers in Ireland. In the NTFS II, food and beverage intake data were collected from 428 teenagers (13-18y) in the Republic of Ireland using a 4-day weighed food record. Nutrient intakes were estimated using Nutritics[®] based on UK and Irish food composition data and usual intakes of dietary fibre were calculated via the NCI-method using SAS[®] Enterprise Guide. Mean DF intakes were compared with the adequate intake (AI) proposed by EFSA of 19g/d for 13-14-year-olds, 21g/d for 15-17-year-olds and 25g/d for 18-year-olds for normal bowel function⁽³⁾. The percent contribution of food groups to dietary fibre intake was calculated using SPSS[®] V26 by the mean proportion method (which provides information about the sources that are contributing to the nutrient intake 'per person')⁽⁴⁾. The mean intake of DF for 13–18-year-olds was 16.9g/d with boys having a higher MDI of DF (18.9g/d) than girls (15.0g/d) ($p < 0.001$). The MDI of DF was 16.2g/d for 13–14-year-olds, 17.3g/d for 15–17-year-olds and 17.6g/d for 18-year-olds with intakes below the AI for all age groups. The key sources of DF were 'bread & rolls' (19%) (primarily white bread 11%), 'grains, rice, pasta & savouries' (14%), 'potatoes & potato products' (13%) and 'breakfast cereals' (12%). Other sources were 'meat & meat products & dishes' (9%), 'vegetables & vegetable dishes' (9%), 'sugars, confectionery, preserves & savoury snacks' (7%) and 'fruit & fruit juices' (7%). While this study has shown a small increase in DF intake among teenagers in Ireland since 2005-06, intakes are still below the AI for all age groups and strategies are needed to increase DF intakes for this age-group. Cereals & cereal products, potatoes, vegetables, fruit and meat dishes are key sources of dietary fibre in the diets of Irish teenagers. These data may be useful in developing food-based dietary guidelines for teenagers in Ireland.

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References

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