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Intakes of fresh beef & lamb in representative samples of children (5–12y) and teenagers (13–18y) in Ireland: Current intakes and changes over time

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Meat is a nutrient-dense food that plays a central role in the diet, making important contributions to intakes of key nutrients[(1)]. This study aimed to estimate current intake of 'fresh beef & lamb', its contribution to energy and nutrient intakes in children and teenagers in Ireland and to determine changes over time.

Analyses were based on data from four nationally representative nutrition surveys: the National Children's Food Survey (NCFS) (2003–04; 5–12y; *n* 594), the National Teens' Food Survey (NTFS) (2004–05; 13–17y; *n* 441), the NCFS II (2017–18; 5–12y; *n* 600) and the NTFS II (2019–20; 13–18y; *n* 428), with detailed methods published elsewhere[(2)]. 'Fresh beef & lamb' was defined as beef/lamb that had not undergone any preserving process other than chilling/freezing/salting and included beef/lamb dishes wrapped in a controlled atmosphere. The mean daily intake (MDI) of 'fresh beef & lamb' was estimated following disaggregation of the non-meat components in composite dishes. The contribution of 'fresh beef & lamb' to energy and nutrient intakes was determined including the non-meat components[(3)]. Statistical differences (proportion of consumers and the MDI of 'fresh beef & lamb') between surveys (NCFS vs NCFS II, NTFS vs NTFS II) were determined using parametric tests (large sample size) in SPSS© V26, with differences identified as $p < 0.001$ (adjusted for multiple testing).

'Fresh beef & lamb' was consumed by 74% of children in the NCFS II and 68% of teenagers in the NTFS II, which was lower than in the NCFS (84%) and NTFS (84%). Beef was more commonly consumed than lamb (72 vs 8% of children and 64 vs 9% of teenagers, respectively). There was no difference in the MDI of 'fresh beef & lamb' in the total population (NCFS II: 19.2 ± 18.6g/d, NCFS: 18.1 ± 19.0g/d; NTFS II: 26.7 ± 31.2g/d, NTFS: 32.8 ± 32.1g/d). For children and teenagers, 'fresh beef & lamb' contributed 6–7% of the MDI of energy and relative to energy, contributed greater proportions of protein (13–15%), fat (10%) and MUFA (11–12%), similar proportions of PUFA (5%) and smaller proportions of carbohydrate and dietary fibre (2–4%). It also contributed greater proportions of vitamins A (10–11%), D (10–16%), B6 (10–12%), B12 (16–20%), niacin (11–13%), iron (10–11%), zinc (18–20%) and potassium (8–10%) and similar proportions of vitamins E and C, thiamin, riboflavin and folate (4–7%). It contributed greater proportions of saturated fat (10–11%), similar proportions of salt (7%) and smaller proportions of sugars (total/free) (1–2%).

These findings show that while the proportion of children and teenagers consuming 'fresh beef & lamb' has decreased, significant proportions still consume this food group with 'fresh beef & lamb' making important contributions to intakes of key nutrients. These data may be useful for policymakers in understanding the dietary role of 'fresh beef & lamb'.

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