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## Energy and macronutrient intakes of Irish teenagers aged 13–17 years

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The objective of the present study was to estimate the energy and macronutrient intakes of Irish teenagers and to investigate their compliance with dietary recommendations. Analysis was based on The National Teens' Food Survey (NTFS), which was carried out between September 2005 and September 2006 to establish a database of habitual food and drink consumption in a representative sample of Irish teenagers aged 13–17 years. A 7 d semi-weighed-food record was used to collect food intake data from 441 teenagers (224 males, 217 females). Analysis of dietary intake data was carried out using WISP© (Tinuviel Software, Llanfechell, Anglesey, UK), which is based on *McCance and Widdowson's The Composition of Foods, Sixth Edition*<sup>(1)</sup>.

Mean daily energy intakes in males and females were 9.5 and 7.1 MJ respectively. Mean daily fat, saturated fat, carbohydrate and added sugar intakes (% total energy; %TE) were 35.6, 14.0, 49.0 and 12.4 respectively. Compliance with population goals<sup>(2)</sup> was evaluated using the compliance method of Wearne & Day<sup>(3)</sup>.

	Compliers (% total)					
	Males			Females		
	All (n 224)	13–14 years (n 95)	15–17 years (n 129)	All (n 217)	13–14 years (n 93)	15–17 years (n 124)
Fat (%TE ≤ 35)	94	95	94	95	96	94
Saturated fat (%TE ≤ 11)	30	25	33	33	26	38
Monounsaturated fat (%TE ≥ 13)	58	59	57	58	59	57
Polyunsaturated fat (%TE ≥ 6.5)	56	58	54	65	58	71
Carbohydrate (%TE ≥ 50)	87	87	87	92	93	92
Added sugars (%TE ≤ 11)	84	86	82	86	84	87

The main food groups contributing to energy and macronutrient intakes are outlined below.

Population (n = 441)	
% Contribution of the main food groups	
Energy	Meat & meat products (16%), bread & rolls (12%), sugars, confectionery, preserves & savouries (12%)
Fat	Meat & meat products (22%), sugars, confectionery, preserves & savouries (13%), milk & yoghurt (12%)
Saturated fat	Milk & yoghurt (19%), meat & meat products (19%), sugars, confectionery, preserves & savouries (15%)
Monounsaturated fat	Meat & meat products (26%), sugars, confectionery, preserves & savouries (15%), potatoes & potato products (11%)
Polyunsaturated fat	Meat & meat products (19%), potatoes & potato products (18%), butter, spreading fats & oils (13%)
Carbohydrate	Bread & rolls (18%), sugars, confectionery, preserves & savouries (13%), potatoes & potato products (13%)
Added sugars	Sugars, confectionery, preserves & savouries (32%), beverages (29%), breakfast cereals (11%)
Protein	Meat & meat products (41%), milk & yogurt (13%), bread & rolls (11%)

At a population level, compliance with the UK goals for saturated fat, monounsaturated fat, polyunsaturated fat, carbohydrate and added sugars ranged from 30 to 93%. Although compliance with the goal for total fat was 95% at a population level, 56% of Irish teenagers exceeded the US maximum recommended fat intake of 35%TE<sup>(4)</sup>.

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1. Food Standards Agency (2002) *McCance & Widdowson's The Composition of Foods, Sixth Edition*. Cambridge: Royal Society of Chemistry.
2. Department of Health (1991) *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom*. London: H. M. Stationery Office.
3. Wearne S & Day M (1999) *Br J Nutr* **81**, S119–S126.
4. Institute of Medicine, Food and Nutrition Board (2002) *Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein and Amino Acids*. Washington, DC: National Academy Press.