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Intakes and sources of energy, macronutrients and dietary fibre in older Irish adults aged ≥ 65 years

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Adequate energy and macronutrient intakes are important for disease prevention and health maintenance in older adults. The objective of this analysis was to estimate usual intakes and sources of energy, macronutrients and dietary fibre in older Irish adults. Analysis was based on the National Adult Nutrition Survey (NANS) (2008-2010) (www.iuna.net). A 4 day semi-weighed food record was used to collect food and beverage intake data from a nationally representative sample of 1500 adults (226 aged \ge 65 years). Nutrient intakes were estimated using UK and Irish food composition tables. Usual intakes of nutrients were calculated via the NCI-method using SAS[©] Enterprise Guide⁽¹⁾ and sources were calculated using SPSS[™].

Table 1. Mean daily intake of energy, macronutrients and dietary fibre in Irish adults aged ≥ 65 years

Nutrient	All (n = 226)			Men (n = 106)			Women $(n = 120)$		
	Mean	SD	Median	Mean	SD	Median	Mean	SD	Mediar
Energy (Kcal)	1778	490	1736	1996	475	1963	1585	417	1548
(kJ)	7450	857	6977	8335	220	8334	6668	195	6665
Protein (g)	77.7	19.7	76.2	85.9	19.1	84.8	70.4	17.3	69.0
(g/kg/body weight)	0.97	0.55	0.88	0.94	0.54	0.85	0.99	0.56	0.90
(% TE)	18-2	2.8	18.0	18.0	2.7	17.8	18.3	2.8	18.2
Carbohydrate (g)	208	63	203	227	62	223	191	58	186
(% TE)	44.4	5.5	44.4	43.2	5.3	43.2	45·5	5.4	45.5
Total Sugars (g)	86.3	36.5	81.2	89 .5	37.0	84.9	83-4	35.8	78.4
Total Fat (g)	67·8	22.1	65.6	75.5	22.1	73.5	61-1	19.7	59.0
(% TE)	33.8	4.8	33.7	33.6	4.7	33.5	34.0	4.8	33.9
Saturated Fat (g)	27.6	10.2	26.4	31-1	10.4	30.0	24.6	9.0	23.4
(% TE)	13.7	2.9	13.6	13.9	2.9	13.7	13.6	2.9	13.5
Monounsaturated fat (g)	24.0	8.1	23.1	26.8	8.1	26.1	21.5	7.1	20.6
(% TE)	11.9	1.9	11.8	11.9	1.9	11.9	11.9	1.9	11.8
Polyunsaturated fat (g)	11.6	4.3	11.0	12.3	4.4	11.8	10.9	4.0	10.3
(% TE)	5.8	1.5	5.7	5.5	1.4	5.4	6.1	1.5	5.9
Dietary Fibre (g)	19.0	6.7	18.3	19.6	6.7	18.9	18.6	6.6	17.9

Table 2. Key sources of energy, macronutrients and dietary fibre

Energy	Meats (17 %), breads (17 %), milk & yoghurt (8 %), potatoes (7 %)
Protein	Meats (38 %), breads (14 %), milk & yoghurt (11 %), fish (9 %)
Carbohydrate	Breads (27 %), potatoes (12 %), fruit & fruit juices (10 %), breakfast cereals (9 %)
Total Fat	Meats (24 %), fat spreads & oils (17 %), milk & yoghurt (9 %), biscuits, cakes & pastries (7 %)
Saturated Fat	Meats (23 %), fat spreads & oils (17 %), milk & yoghurt (13 %), biscuits, cakes & pastries (8 %)
Dietary Fibre	Breads (29 %), vegetables (18 %), fruit & fruit juices (15 %), potatoes (12 %)

Mean intakes of protein were above the Population Reference Intake (PRI) of 0.83 g/kg body weight per day proposed by the European Food Safety Authority (EFSA)⁽²⁾. Mean daily intakes of carbohydrate and total fat were approaching or within the reference intake ranges (45–60 %TE, 20–35 %TE)^(3,4); however, the mean intake of saturated fat was higher than recommended (≤ 10 % $(TE)^{(5)}$. Furthermore mean daily intake of dietary fibre was lower than the adequate intake of 25 g/d proposed by EFSA⁽³⁾. These findings may be useful for developing dietary strategies to improve macronutrient and dietary fibre intake in older Irish adults.

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