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The National Adult Nutrition Survey: dietary fibre intake of Irish adults

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The objective of the current research was to determine the dietary fibre (DF) intake of Irish adults. Analysis was based on the National Adult Nutrition Survey (NANS), which was carried out to establish a comprehensive database of habitual food and drink consumption in a representative sample of adults aged 18 years and above in the Republic of Ireland. A 4-d semi-weighed food diary was used to collect dietary intake data from 1500 adults (18–64 years, *n* 1274; ≥ 65 years, *n* 226). Dietary intake data were entered into WISP[®], (Tinuviel Software, Llanfechell, Anglesey, UK), which is based on *McCance and Widdowson's The Composition of Foods*, 6th edition⁽¹⁾ and the Irish food composition database⁽²⁾.

Population group	<i>n</i>	DF, g		DF, g/MJ	
		Mean	SD	Mean	SD
18–64 years					
All	1274	19.2	8.0	2.3*	0.8
Males	634	21.1 ^a	8.6	2.1 ^{a*}	0.7
Females	640	17.3 ^b	6.8	2.4 ^{b*}	0.8
≥65 years					
All	226	18.9	7.9	2.6	0.9
Males	106	19.6	8.7	2.4 ^a	0.8
Females	120	18.4	7.0	2.8 ^b	0.9

^{ab}Denotes significant difference within age group between sexes (*P*<0.001).

*Denotes significant difference between age groups (*P*<0.01).

Food group	18–64 years (<i>n</i> 1274)		≥65 years (<i>n</i> 226)	
	%	g	%	g
Bread and rolls	26	4.8	29	5.4
<i>Brown/wholemeal breads and rolls</i>	15	3.1	19	3.7
<i>White breads and rolls</i>	9	1.4	8	1.1
Vegetables and vegetable dishes	17	3.3	18	3.2
<i>Peas, beans and lentils</i>	6	1.2	5	0.9
<i>Vegetable dishes</i>	2	0.4	1	0.3
Potatoes and potato products	13	2.2	12	2.0
<i>Potatoes (e.g. boiled, baked, mashed)</i>	5	1.0	8	1.4
<i>Chipped/fried potatoes</i>	7	1.2	4	0.6
Fruit and fruit juices	10	2.1	15	3.1
<i>Fruit</i>	9	2.0	14	2.9
<i>Juices and smoothies</i>	1	0.1	1	0.1
Breakfast cereals	9	2.0	10	2.1
<i>Ready-to-eat breakfast cereals</i>	8	1.7	7	1.5
<i>Other breakfast cereals</i>	2	0.3	4	0.6
Others	25	4.7	17	3.2
Total	100	19.2	100	18.9

While men had higher DF intakes than females in both age groups, women had more fibre-dense diets. Adults aged ≥ 65 years had more fibre-dense diets than those aged 18–64 years. Current DF intakes are inadequate, with over 80% of both age groups not meeting the EFSA 25 g/d recommendation⁽³⁾. DF is important for normal gastrointestinal function and inadequate intakes can lead to impaired bowel function and constipation.

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1. Food Standards Agency (2002) *McCance and Widdowson's The Composition of Foods* 6th ed. Cambridge: Royal Society of Chemistry.
2. Black LJ, Ireland J, Møller A *et al.* (2010) *J Food Compos Anal* (In the Press) doi:10.1016/j.jfca.2011.01.015
3. EFSA Panel on Dietetic Products, Nutrition, and Allergies (NDA) (2010) Scientific opinion on dietary reference values for carbohydrates and dietary fibre. *EFSA J* 8, 1462–1539.