

The challenge of translating nutrition research into public health nutrition, University College, Dublin, 18–20 June 2008

Dietary fibre (DF) and NSP intake in Irish teenagers aged 13–17 years

S. Bannon, J. Walton, E. M. Hannon and A. Flynn

Department of Food and Nutritional Sciences, University College Cork, Cork, Republic of Ireland

The objectives of the present study were to measure DF and NSP intakes in Irish teenagers aged 13–17 years and the contribution of food groups to DF intake. Data from the National Teens' Food Survey (NTFS) was used for this purpose. The NTFS was carried out between September 2005 and 2006 to establish a database of habitual food and drink consumption of a representative sample of Irish teenagers aged 13–17 years. A 7 d semi-weighed food record was used to collect food 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*⁽¹⁾.

Mean daily DF and NSP (g and g/10MJ energy) intakes are reported. For both age-groups mean daily DF and NSP intakes were significantly ($P < 0.001$) higher for males compared with females. Intakes increased across age-groups for both DF and NSP. However, there were no significant differences in fibre density as DF or NSP across age-groups or between genders.

	Males				Females			
	13–14 years (n 95)		15–17 years (n 129)		13–14 years (n 93)		15–17 years (n 124)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
DF: g/d	16.5*	5.5	18.5*	9.0	12.9	4.0	13.6	4.5
g/10MJ per d	18.4	5.0	18.6	6.1	18.4	3.6	19.6	6.0
NSP: g/d	12.3*	4.1	13.7*	7.1	9.7	3.1	10.3	3.5
g/10MJ per d	13.8	4.0	13.8	5.0	13.7	2.8	14.8	4.7

Values were significantly higher than those for females in same age-group: * $P < 0.001$.

The contribution of food groups (g and %) to mean daily DF intakes by age and gender are reported.

	Males				Females			
	13–14 years (n 95)		15–17 years (n 129)		13–14 years (n 93)		15–17 years (n 124)	
	%	g	%	g	%	g	%	g
Bread and rolls	22.5	3.6	22.8	4.3	19.7	2.5	22.5	3.1
Potatoes and potato products	19.5	3.1	18.3	3.0	20.4	2.4	19.4	2.5
Vegetables and vegetable dishes	11.2	1.9	10.9	2.1	11.5	1.6	11.6	1.6
Breakfast cereals	13.4	2.3	13.6	2.7	8.0	1.1	8.4	1.3
Grains, rice, pasta and savouries	10.4	1.7	9.9	1.6	10.3	1.3	9.3	1.2
Sugars, confectionery, preserves and savoury snacks	6.4	1.1	5.6	1.0	10.6	1.3	9.0	1.1
Fruit and fruit juices	5.3	1.0	6.3	1.6	7.2	1.0	8.8	1.3
Meat and meat products	4.9	0.8	5.5	0.9	5.5	0.7	4.2	0.5
Other food groups	6.5	1.0	7.0	1.3	6.9	0.9	6.8	0.9
Total	100	16.5	100	18.5	100	12.8	100	13.6

A significantly ($P < 0.001$) higher percentage of females (13–14 years, 91; 15–17 years, 93) compared with males (13–14 years, 68; 15–17 years, 72) did not meet the American Health Foundation recommendation⁽²⁾ of a DF intake (g) of \geq age + 5.

The project was funded by the Irish Government under the National Development Plan 2000–2006.

1. Food Standards Agency (2002) *McCance & Widdowson's The Composition of Foods Sixth Edition*. Cambridge: Royal Society of Chemistry.
2. Williams CL, Bollella M & Wynder EL (1995) *Pediatrics* **96**, 985–988.