

**Supplementary Table 1** Vitamin D intakes ( $\mu\text{g}/\text{day}$ ) from all sources, from food sources, from food sources excluding the added vitamin D component, from the added vitamin D component and from supplements in Irish children and teenagers

		All			Boys			Girls		
		5-8	9-12	13-17	5-8	9-12	13-17	5-8	9-12	13-17
<i>Total population</i>	<i>n</i>	296	298	441	145	148	224	151	150	217
All sources	Mean	2.8	2.8	3.2	2.8	3.0	3.7	2.7	2.7	2.7
	SD	2.4	2.1	2.5	2.4	2.1	2.6	2.4	2.1	2.3
	Median	1.9	2.1	2.4	2.0	2.3	2.7*	1.9	2.0	1.9
	P5	0.8	0.8	0.8	0.6	0.7	1.2	0.8	0.9	0.6
	P95	8.2	6.6	8.8	8.5	7.1	9.4	7.5	6.6	7.7
	% < EAR	98	99	98	97	99	97	98	99	98
Food sources (including added D)	Mean	1.9	2.2	2.6	1.9	2.4	3.1	2.0	2.1	2.1
	SD	1.1	1.3	1.8	1.1	1.4	1.8	1.2	1.2	1.5
	Median	1.6	1.9	2.2	1.6	2.1	2.5*	1.7	1.9	1.7
	% of total intake	70	79	82	67	80	85	73	78	79
Food sources (excluding added D)	Mean	1.3	1.5	1.8	1.3	1.5	2.1	1.4	1.4	1.5
	SD	0.7	0.7	1.0	0.7	0.7	1.0	0.8	0.7	0.9
	Median	1.1	1.3	1.5	1.2	1.4	1.9*	1.1	1.3	1.3
	% of total intake	47	52	55	45	51	56	50	53	54
Added D only	% of food sources intake	68	66	67	67	64	67	68	68	69
	Mean	0.6	0.8	0.9	0.6	0.9	1.0	0.6	0.7	0.7
	SD	0.9	1.1	1.4	0.9	1.2	1.5	0.9	0.9	1.1
	Median	0.3	0.4	0.3	0.3	0.4	0.5*	0.3	0.3	0.2
Supplements	% of total intake	23	27	27	22	29	28	23	25	25
	% of food sources intakes	32	34	33	33	36	33	32	32	31
	Mean	0.8	0.6	0.6	0.9	0.6	0.6	0.7	0.6	0.6
	SD	2.1	1.6	1.6	2.1	1.6	1.6	2.1	1.7	1.6
	Median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% of total intake	30	21	18	33	20	15	27	22	21

\*Significantly different ( $p < 0.05$ ) from girls in the same age group

**Supplementary Table 2** Vitamin D intakes ( $\mu\text{g}/\text{day}$ ) from all sources, from food sources, from food sources excluding the added vitamin D component, from the added vitamin D component and from supplements in users of vitamin D-containing supplements in Irish children and teenagers

		All			Boys			Girls		
		5-8	9-12	13-17	5-8	9-12	13-17	5-8	9-12	13-17
<i>Users of D-containing supplements</i>	<i>n</i>	61	47	66	33	26	33	28	21	33
All sources	Mean	6.3	5.9	6.8	6.3	5.6	7.4	6.3	6.2	6.2
	SD	2.9	2.7	2.8	2.8	2.6	3.0	3.1	2.9	2.5
	Median	6.1	6.0	6.7	5.8	4.9	7.3	6.2	6.0	5.8
	P5	2.7	2.0	2.5	2.5	1.6	2.3	2.3	2.1	2.4
	P95	11.9	12.7	11.4	12.5	11.8	12.7	13.8	13.3	11.4
	% < EAR	89	94	88	88	96	88	89	90	88
Food sources (including added D)	Mean	2.2	2.0	3.0	2.2	2.1	3.5	2.3	1.9	2.4
	SD	1.5	1.1	1.7	1.5	1.0	1.8	1.7	1.2	1.4
	Median	1.6	1.8	2.5	1.6	2.0	3.4*	1.6	1.7	2.2
	% of total intake	35	35	44	35	38	48	37	31	39
<i>Food sources (excluding added D)</i>	Mean	1.4	1.5	1.9	1.4	1.5	2.4	1.3	1.4	1.4
	SD	0.8	0.9	1.2	1.0	0.9	1.4	0.6	0.9	0.5
	Median	1.1	1.3	1.7	1.3	1.3	2.3*	1.1	1.2	1.4
	% of total intake	22	25	29	23	27	33	20	23	23
<i>Added D only</i>	% of food sources intakes	61	72	65	67	72	69	55	72	59
	Mean	0.9	0.6	1.0	0.7	0.6	1.1	1.0	0.5	1.0
	SD	1.3	0.6	1.3	1.2	0.6	1.4	1.4	0.6	1.3
	Median	0.3	0.4	0.5	1.3	1.3	0.5	1.1	1.2	0.4
	% of total intake	14	10	15	12	11	15	17	9	16
Supplements	% of food sources intakes	39	28	35	33	28	31	45	28	41
	Mean	4.1	3.8	3.8	4.1	3.5	3.8	4.0	4.3	3.8
	SD	2.8	2.2	2.2	2.4	2.1	2.3	3.2	2.3	2.1
	Median	4.3	4.3	3.7	3.6	3.2	3.8	4.6	4.3	3.6
	% of total intake	65	65	56	65	62	52	63	69	61

\*Significantly different ( $p < 0.05$ ) from girls in the same age group

**Supplementary Table 3** Vitamin D intakes ( $\mu\text{g}/\text{day}$ ) from all food sources, from food sources excluding the added vitamin D component and from the added vitamin D component in non-users of vitamin D-containing supplements in Irish children and teenagers

		All			Boys			Girls		
		5-8	9-12	13-17	5-8	9-12	13-17	5-8	9-12	13-17
<i>D-fortified food consumers</i>	<i>n</i>	167	171	231	74	80	126	93	91	105
Food sources	Mean	2.1	2.6	3.1	2.1	3.0	3.5	2.1	2.4	2.6
	SD	1.0	1.4	1.9	1.0	1.5	2.0	1.1	1.2	1.8
	Median	1.9	2.2	2.5	2.0	2.5*	2.9*	1.9	2.0	2.2
	P5	1.0	1.0	1.1	0.9	1.0	1.5	0.9	1.0	0.8
	P95	4.2	5.5	7.1	4.1	5.9	7.5	4.3	5.1	6.8
	% < EAR	100	100	99	100	100	98	100	100	100
<i>Food sources (excluding added D)</i>	Mean	1.3	1.5	1.8	1.3	1.6	1.9	1.4	1.4	1.6
	SD	0.8	0.7	1.0	0.6	0.7	0.8	0.9	0.8	1.1
	Median	1.1	1.4	1.5	1.1	1.4	1.9*	1.2	1.3	1.3
	% of total intake	63	56	57	59	53	55	66	60	59
<i>Added D only</i>	Mean	0.8	1.2	1.3	0.9	1.4	1.6	0.7	0.9	1.1
	SD	0.8	1.2	1.5	0.8	1.3	1.7	0.7	1.0	1.2
	Median	0.6	0.8	0.8	0.6	1.0*	1.0*	0.5	0.6	0.6
	% of total intake	37	44	43	41	47	45	34	40	41
<i>Non-consumers of D-fortified foods</i>	<i>n</i>	68	80	144	38	42	65	30	38	79
Food sources (excluding added D)	Mean	1.2	1.4	1.7	1.1	1.4	2.2	1.3	1.4	1.4
	SD	0.5	0.7	1.0	0.4	0.7	1.1	0.6	0.6	0.8
	Median	1.2	1.2	1.4	1.2	1.3	1.9*	1.2	1.2	1.2
	P5	0.5	0.5	0.6	0.4	0.5	0.9	0.5	0.5	0.4
	P95	2.1	2.7	3.6	2.0	2.7	4.1	2.7	2.8	2.8
	% < EAR	100	100	100	100	100	100	100	100	100

\*Significantly different ( $p < 0.05$ ) from girls in the same age group

**Supplementary Table 4** Mean percentage (and quantitative) contribution of food groups to vitamin D intakes in the total population and in users of vitamin D-containing supplements in Irish children and teenagers

	Total population (all sources)			Users of vitamin D-containing supplements		
	5-8	9-12	13-17	5-8	9-12	13-17
	% (µg)	% (µg)	% (µg)	% (µg)	% (µg)	% (µg)
<i>Total number of participants</i>	296	298	441	61	47	66
Meat and meat products	16 (0.4)	18 (0.5)	22 (0.7)	7 (0.4)	8 (0.5)	10 (0.7)
<i>of which:</i>						
Beef and beef dishes	3 (0.1)	4 (0.1)	5 (0.2)	1 (0.1)	1 (0.1)	2 (0.2)
Chicken and chicken dishes	2 (0.1)	2 (0.1)	4 (0.1)	1 (0.1)	1 (0.1)	2 (0.1)
Bacon and ham	3 (0.1)	3 (0.1)	4 (0.1)	1 (0.1)	1 (0.1)	2 (0.1)
<i>of which:</i>						
Ham	2 (0.1)	2 (0.1)	2 (0.1)	1 (0.1)	1 (0.1)	2 (0.1)
Burgers and kebabs	1 (0.0)	2 (0.1)	2 (0.1)	0 (0.0)	2 (0.1)	1 (0.1)
Sausages	4 (0.1)	4 (0.1)	3 (0.1)	2 (0.1)	1 (0.1)	2 (0.1)
Fish and fish dishes	6 (0.2)	7 (0.2)	7 (0.2)	3 (0.2)	5 (0.3)	4 (0.3)
<i>of which:</i>						
Oily fish	3 (0.1)	3 (0.1)	4 (0.1)	2 (0.1)	2 (0.1)	3 (0.2)
<i>of which:</i>						
Salmon, fresh	1 (0.0)	2 (0.0)	2 (0.0)	1 (0.1)	1 (0.0)	2 (0.1)
Salmon, smoked	1 (0.0)	1 (0.0)	2 (0.1)	0 (0.0)	1 (0.0)	0 (0.0)
White fish	2 (0.1)	3 (0.1)	2 (0.1)	1 (0.1)	2 (0.1)	1 (0.1)
<i>of which:</i>						
Tuna, canned	1 (0.0)	2 (0.1)	1 (0.0)	1 (0.1)	1 (0.1)	0 (0.0)
Cod, fresh	0 (0.0)	0 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)
Milk and yoghurts	13 (0.4)	13 (0.4)	10 (0.3)	8 (0.5)	5 (0.3)	6 (0.4)
<i>of which:</i>						
Reduced fat milk, fortified	3 (0.1)	2 (0.1)	3 (0.1)	3 (0.2)	1 (0.0)	2 (0.1)
Whole milk, unfortified	9 (0.2)	8 (0.2)	6 (0.2)	4 (0.3)	3 (0.2)	3 (0.2)
Reduced fat milk, unfortified	0 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)
Butter and fat spreads	7 (0.2)	7 (0.2)	10 (0.3)	3 (0.2)	3 (0.2)	5 (0.3)
<i>of which:</i>						
Fat spreads, fortified	6 (0.2)	6 (0.2)	8 (0.3)	3 (0.2)	3 (0.2)	4 (0.3)
Nutritional supplements	30 (0.8)	21 (0.6)	18 (0.6)	65 (4.1)	65 (3.8)	56 (3.8)
<i>of which:</i>						
Multinutrient	27 (0.8)	19 (0.5)	13 (0.4)	58 (3.7)	59 (3.5)	40 (2.7)
Cod liver oil	3 (0.1)	2 (0.1)	5 (0.2)	6 (0.4)	6 (0.4)	16 (1.1)
Calcium plus D	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)
Breakfast cereals	12 (0.3)	17 (0.5)	15 (0.5)	8 (0.5)	6 (0.4)	9 (0.6)
<i>of which:</i>						
RTEBC	12 (0.3)	17 (0.5)	15 (0.5)	8 (0.5)	6 (0.4)	8 (0.6)
Eggs and egg dishes	5 (0.1)	5 (0.1)	5 (0.1)	2 (0.1)	2 (0.1)	2 (0.1)
Biscuits, cakes and pastries	2 (0.1)	3 (0.1)	3 (0.1)	1 (0.1)	2 (0.1)	2 (0.1)
Other	8 (0.2)	9 (0.2)	10 (0.3)	5 (0.3)	5 (0.3)	6 (0.4)
Mean daily intake (µg)	2.8	2.8	3.2	6.3	5.9	6.8