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Sources of dietary *n*-3 PUFA in fish-eating, meat-eating and vegetarian middle-aged women in the EPIC-Norfolk cohort

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The *n*-3 PUFA (EPA and DHA), supplied by fish in the diet, are thought to be protective for CVD, but little is known about which foods supply EPA and DHA in the diet of non-fish-eaters that is, vegetarians and meat-eaters.

Sources of intake of EPA and DHA were investigated in women aged 39–78 years with different dietary habits in Norfolk, UK (vegetarians, meat-eaters and fish-eaters). Dietary intakes were obtained from a 7 d food diary using the DINER data entry system and a newly-developed database of fatty acids⁽¹⁾. Mean intake of EPA and DHA was calculated by food group.

Table. Intakes of EPA and DHA and percentage contribution from food groups by dietary habit (groups contributing ≥5% to intake of either EPA or DHA)

	EPA				DHA			
	All	Veg	Meat	Fish	All	Veg	Meat	Fish
<i>n</i>	7056	108	996	5952	7366	170	938	6258
Intake (g/d)	0.09	0.01	0.02	0.11	0.13	0.001	0.01	0.15
Dairy	2.0	20.5	10.7	1.7	0.0	0.0	0.0	0.0
Eggs	0.3	4.8	1.8	0.3	0.1	11.8	1.0	0.1
White fish	3.6	0.0	0.0	3.7	6.2	0.0	0.0	6.2
Fatty fish	59.6	0.0	0.0	61.1	63.2	0.0	0.0	64.0
Fish products and dishes	14.8	0.0	0.0	15.2	17.5	0.0	0.0	17.7
All fish	81.4	0.0	0.0	83.5	88.8	0.0	0.0	89.8
Meats	6.1	0.0	42.7	5.3	7.3	0.0	92.6	6.3
Spreading fats	6.4	50.7	36.8	5.6	0.0	0.0	0.0	0.0
Soups and sauces	0.8	16.4	2.4	0.7	1.0	88.2	6.3	0.9

Veg, vegetarians; meat, meat-eaters; fish, fish-eaters.

For vegetarians the main sources of EPA and DHA were spreading fats and soups and sauces whereas for meat-eaters the main sources were meats and spreading fats. As expected, for fish-eaters fatty fish supplied the majority of dietary EPA and DHA.

Although total intake of EPA and DHA in the diet of vegetarians and meat-eaters was only 0.7–18% of that of fish-eaters, non-fish sources are probably important in the diets of vegetarians and meat-eaters.

1. Welch AA, McTaggart A, Mulligan A, Luben R, Walker N, Khaw KT, Day NE & Bingham SA (2001) *Public Health Nutr* 4, 1253–1265.