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Bread in the diet: consumption and contribution to nutrient intakes of British adults

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Bread is regularly consumed in the UK diet. However, its contribution to energy and nutrient intake and the frequency of consumption have not been thoroughly investigated.

Bread consumption was estimated using 7 d weighed dietary records in a nationally-representative sample of British adults aged 19–64 years from the 2000–1 National Diet and Nutrition Survey[1]. From >4600 foods consumed among 1724 adults, 102 food descriptions were identified as types of bread (including rolls). These items included thirty-two for white, twenty for wholemeal, seven for soft grain and forty-three for other breads such as brown, granary, rye and oatmeal. From these foods the following were analysed: consumption of bread and its subgroups; contributions to energy, macronutrient and micronutrient intake; number of bread-eating occurrences over 7 d; number of bread-eating occurrences by time of day. Bread consumption was examined by gender, age, region, occupational social class and cigarette-smoking habit.

Median bread consumption was 90 (interquartile range 59–217) g/d, of which white and wholemeal bread contributed 65 % and 17 % respectively to total consumption. White and wholemeal bread were consumed by 90 % and 37 % of adults respectively. Consequently, despite having a lower content of several nutrients and fibre, the contribution of white bread to energy and nutrient intakes was substantially higher than that of wholemeal bread (Table). Bread made a disproportionately large contribution to the intakes of carbohydrate, fibre, Fe, Mn, Ca and Na relative to energy. Wholemeal bread provided more fibre and folate and less Na than white bread relative to energy contribution (Table).

	Mean percentage contribution of bread to dietary intake of:								
Type of bread	Energy	Protein	Carbohydrate	Fibre*	Folate	Fe	Mn	Ca	Na
All	13	12	21	20	11	16	25	18	21
White	8	8	14	11	6	10	12	13	14
Wholemeal	2	2	3	5	2	3	7	2	3

*As NSP.

Men consumed substantially more total bread and white bread than women (medians; 113 g/d *v.* 76 g/d and 70 g/d *v.* 43 g/d respectively; $P<0.001$ in each case, Mann-Whitney *U* test). Higher consumption of white bread was also found among those with a manual *v.* non-manual occupation (medians; 65 g/d *v.* 47 g/d respectively; $P<0.001$). Percentage contributions of bread to intakes of fat, saturated fat and sugars were very low (2–4 %) throughout.

On average, there were nine bread-eating occurrences per week, of which about one-third occurred during the lunchtime period (12.00 hours–14.00 hours). Only one bread-eating occurrence per week was wholemeal bread. The percentage of adults having two or more bread-eating occurrences per d increased with age, from 9 % in those aged 19–34 years to 25 % in those aged 55–64 years.

In summary, bread consumption among adults in 2000–1 was dominated by white bread, which consequently made a greater contribution to energy, fibre and nutrient intakes than other types of bread, particularly among men and manual workers. Replacing white bread with wholemeal bread would increase the nutrient density of the diet.

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1. Henderson L, Gregory J & Swan G (2002) *The National Diet & Nutrition Survey: Adults Aged 19 to 64 Years*. vol. 1: *Types and Quantities of Foods Consumed*. London: The Stationery Office.