



Slicing the salt content of bread in Ireland: a review of reformulation since 2003

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For prevention of cardiovascular disease daily salt intakes should be restricted⁽¹⁾ and should not exceed 6 g/day⁽²⁾. However, in 2001 adults in Ireland were estimated to consume 10 g/day of salt with over a quarter coming from bread⁽³⁾. In 2003, the Food Safety Authority of Ireland (FSAI) initiated with the food industry a programme to reduce the salt content of processed food⁽²⁾. Bread is a staple food in Ireland, with wholemeal being actively promoted for a healthy diet⁽⁴⁾. This study evaluates the impact of the salt reduction programme by assessing the level of salt in bread since 2003. Breads commonly available in Ireland were identified through market research. These were categorised into five different bread types; white, brown, wholemeal/wholegrain, soda and speciality. Samples (*n* 694) were collected from each category at five different time points between 2003 and 2015 and analysed at the Public Analyst's Laboratory Galway. The salt content of the breads (g per 100 g) was assessed using flame photometry. The 2013 and 2015 (2010/2011 for soda bread) salt content findings were compared with those of 2003. As shown in the table, the salt content has significantly decreased (up to 32 %) in white, brown, wholemeal/wholegrain, soda and speciality breads since 2003. The salt content of wholemeal/ wholegrain breads decreased up to 2013, whereas white and speciality bread decreased until 2010/2011 and remained stable onwards. However the salt content of brown breads having reduced initially (in 2005/ 2006) has tended to fluctuate since.

	2003		2005/2006		2010/2011		2013		2015	
	<i>n</i>	Salt (g) per 100 g	<i>n</i>	Salt (g) per 100 g	<i>n</i>	Salt (g) per 100 g	<i>n</i>	Salt (g) per 100 g	<i>n</i>	Salt (g) per 100 g
White	22	1.32 (1.17–1.78)	22	1.22 (0.86–1.84)	60	1.12 (0.66–1.63)	36	1.12* (0.86–1.63)	39	1.12* (0.76–1.57)
Brown	15	1.41 (1.02–2.4)	23	1.15 (0.86–1.33)	24	1.23 (0.89–1.60)	36	1.07* (0.89–1.42)	18	1.30* (1.02–1.52)
Wholemeal/ Wholegrain	24	1.48 (0.43–2.39)	27	1.11 (0.59–1.43)	55	1.17 (0.64–1.98)	42	1.02* (0.76–1.52)	28	1.09* (0.81–1.42)
Soda	13	2.22 (1.46–3.12)	40	1.96 (1.22–2.50)	18	1.85* (0.76–2.03)	0	No data	0	No data
Speciality	26	1.43 (0.81–2.27)	31	1.16 (0.71–1.86)	29	0.99 (0.91–1.40)	9	0.99* (0.86–1.14)	57	0.97* (0.61–1.88)

Values are median (range). *Median value significantly different from 2003, *P* < 0.05 obtained by Mann–Whitney U.

Since 2003 reformulation has significantly lowered the salt content of bread in Ireland. In 2011 it was estimated that salt intakes among adults in Ireland fell to 7.4 g/day with 22 % coming from bread⁽⁵⁾. Periodic monitoring is required to ensure reduced salt levels in bread are maintained.

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2. Food Safety Authority of Ireland (2005). Salt and Health: Review of the Scientific Evidence and Recommendations for Public Policy in Ireland. Dublin: FSAI.
3. North/South Ireland Food Consumption Survey (2001).
4. Flynn MAT, O'Brien CM, Ross V *et al.* (2012) *Public Health Nutr* 15, 527–37.
5. 5 National Adult Nutrition Survey (2011).