

REPORT REVIEW

Salt and Health: Review of the Scientific Evidence and Recommendations for Public Policy in Ireland

Irish people are consuming far in excess of the daily allowance for salt and consumers are encouraged to reduce their salt intake to a maximum of 6g/day. This first comprehensive scientific report is published by the Food Safety Authority of Ireland's (FSAI) Scientific Committee and is entitled 'Salt and Health: Review of the Scientific Evidence and Recommendations for Public Policy in Ireland'.

The report concludes that excessive salt intake is a major factor in the number of deaths from cardiovascular disease and stroke caused by high blood pressure and hypertension each year.

Cardiovascular disease accounts for approximately 41% of all deaths in Ireland. High blood pressure is one of the major modifiable causal factors in the development of cardiovascular disease. A substantial body of evidence has emerged from observational and experimental research to suggest that high dietary salt intake is an important causal factor in the rise in blood pressure with age and in the development of essential hypertension in industrialised countries such as Ireland. There is also evidence that relatively modest reductions in salt intake have the potential to produce a significant reduction in average blood pressure at a population level, with a concomitant substantial impact on the burden of morbidity and mortality from cardiovascular disease.

In Ireland, the average daily salt intake is approximately 10g in adults. Data are lacking on salt intake in children; however, data from the UK suggest that the average daily salt intake in children aged 4-6 years and 7-10 years exceeds 5g and 6g, respectively, which far exceed physiological requirements. The recommended dietary daily allowance for adults is 1.6g/70mmol sodium (4g salt).

Over 90% of sodium found in the diet is in the form of sodium chloride (salt), with 1g of sodium equivalent to 2.54g of salt. It is estimated that 15-20% of total dietary sodium intake is from discretionary sources (salt added in cooking and at the table), 15% from naturally occurring

sodium in unprocessed foods and 65-70% from manufactured foods.

Meat, fish and their products, particularly processed meats, provide almost 30% of total sodium (salt) intake, with a further 26% provided by bread and rolls. Other contributing foods include milk and milk products, soups, sauces and miscellaneous foods, spreading fats, biscuits/cakes/pastries/confectionery and breakfast cereals.

Two recent major reports (the UK Scientific Advisory Committee on Nutrition report on 'Salt and Health' in 2003 and the US Institute of Medicine report on 'Dietary Reference Intakes for Water, Potassium, Sodium, Chloride and Sulphate' in 2004) provide a detailed and comprehensive review of the evidence on the relationship between salt and health. The Scientific Committee of the FSAI concurs with the main conclusions from these reports as follows:

- There is a direct, independent causal link between dietary salt intake and blood pressure.
- The magnitude of the effect of salt on blood pressure is significant at the clinical and population level.
- As there is a spectrum of responses to dietary salt exposures, there are no agreed criteria to identify salt sensitivity and the concept is of limited relevance.

The Irish Heart Foundation (IHF) Council on Blood Pressure issued a position statement on salt, blood pressure and heart disease during Irish Heart Week 2004, and this new report very strongly endorses the Council's position. The IHF raised the issue of high salt consumption to Irish consumers, highlighting the convincing evidence that sodium intake, mainly through dietary salt, is directly associated with blood pressure. The IHF's revised nutrition policy recommends no more than 6g/day of salt.

Table 1 outlines recommendations made in the report for government bodies, industry stakeholders and consumers to

Table 1. Major recommendations

General recommendations	<ol style="list-style-type: none"> 1. In the development of programmes for reducing salt consumption, an achievable target for the adult Irish population is considered a mean intake of 2.4g/100mmol sodium (6g salt) per day. However, this should not be regarded as an optimal or ideal level of consumption. 2. As distinct from the achievable population target, individuals should be advised that the recommended daily allowance (RDA) for sodium of 1.6g/70mmol (4g salt) per day is sufficient to meet the physiological needs of 97.5% of the population. 3. The particular vulnerability of children and the elderly to the adverse effects of high salt intake needs to be highlighted in discussion with the food industry regarding new product development and the reformulation of existing products.
Recommendations for the FSAI	<ol style="list-style-type: none"> 4. The FSAI should continue to work in consultation with the food industry to reduce the salt content of processed and prepared foods. 5. The FSAI and other relevant government bodies should support the clear and comprehensive nutritional labelling of the salt content of all processed pre-packaged food, including information on the RDA for sodium in a single serving. 6. Consideration should be given to the mandatory labelling of foods with salt content above a specific threshold as 'high salt'. In addition, the proposed EU health claims legislation should set clear guidelines for the use of claims such as 'low salt' or 'reduced salt'. 7. The FSAI should develop structures and methods to monitor the salt content of processed food and food prepared in the food service sector.
Recommendations for other agencies	<ol style="list-style-type: none"> 8. The public sector should develop policies and procedures to reduce the salt content of food served to staff and clients in public agencies, including hospitals and institutional care settings. 9. The Department of Health and Children and other relevant agencies should work in collaboration with consumer groups and other stakeholders to develop national information and awareness campaigns addressing: the links between salt, blood pressure, heart attack and stroke; the salt content of processed food; and the need to reduce the amount of salt added during cooking and at table. Health education/promotion campaigns addressing salt intake should be integrated as appropriate with other core messages on healthy diet and lifestyle. 10. The Department of Health and Children should commission studies to accurately assess salt intake in the general population, including relevant sub-groups such as children and the elderly. 11. The Department of Health and Children should commission regular population health monitoring studies addressing the distribution of blood pressure and the prevalence of hypertension in children and adults.
Recommendations for the food industry	<ol style="list-style-type: none"> 12. The food industry should work to achieve a gradual, sustained and universal reduction in the salt content of processed foods and foods prepared by the food service sector. 13. The food industry should attach high priority to research aimed at addressing technological, shelf-life, preservation and taste issues in relation to the reduction of the salt content of processed food.

address this public health issue and increase awareness of the dangers of over-consumption of salt.

The IHF welcomes the publication of this new report, which unequivocally demonstrates the link between high salt intake and high blood pressure leading to increased risk of heart attack and stroke.

Dr Alice Stanton, chairperson of the IHF's Council on Blood Pressure called for the immediate implementation of the recommendations in this report, saying: "As the report shows very clearly, a reduction in blood pressure across the Irish population, which could be achieved by a reduction in salt consumption by a teaspoon (6g) per day, would prevent

a total of about 1,700 deaths from cardiovascular disease each year.

"One of the easiest and most practical ways to reduce salt intake by the Irish population would be to reduce the concentration of salt in processed and convenience foods," continued Dr Stanton.

To help adults achieve a recommended salt intake of no more than 6g/day, the IHF has issued a free information booklet for the public. Entitled 'Time to cut down on salt,' it is available by telephoning 1850 365365, from the website www.irishheart.ie, phone *safefood* 1850 404 567 or visit www.safefoodonline.com for information on reducing salt intake.