

OP23

POTENTIAL CARDIOVASCULAR MORTALITY REDUCTIONS IN IRELAND ASSOCIATED WITH SPECIFIC FOOD POLICY OPTIONS

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Objective To estimate the potential reduction in Irish cardiovascular (CVD) mortality possible by decreasing salt, trans fat and saturated fat consumption, and by increasing fruit and vegetable consumption.

Methods The previously validated IMPACT Food Policy Model was used to estimate potential annual CVD mortality reductions associated with various dietary policy scenarios. Two scenarios were modelled. Firstly, a conservative scenario

which involved a small reduction in salt intake by 1 g/day, trans-fat by 0.5% of energy intake, saturated fat by 1% energy intake and increasing fruit and vegetable intake by 1 portion per day. Secondly, a more substantial but politically feasible scenario that involved a reduction in salt intake by 3 g/day, trans-fat by 1% of energy intake, saturated fat by 3% energy intake and increasing fruit and vegetable intake by 3 portions per day. Population, mortality and dietary data for Irish adults aged 25–84 years were used. Results were stratified by 10 year age and sex. A probabilistic sensitivity analysis was undertaken. Best, maximum and minimum estimates were calculated using Monte Carlo simulation.

Results The small, conservative changes in food policy could result in approximately 450 fewer cardiovascular deaths per year. This would comprise approximately 215 fewer coronary heart disease (CHD) deaths in men (min 167, max 286), approximately 60 fewer CHD deaths in women (min 45, max 76), approximately 115 fewer stroke deaths in men (min 92, max 146) and 65 fewer stroke deaths in women (min 50, max 79). Approximately 29% of the 450 fewer deaths could be attributable to decreased trans-fat consumption, 23% to decreased saturated fat, 23% to decreased salt consumption and 26% to increased fruit and vegetable consumption. The 450 fewer deaths would represent a 10% reduction in CVD mortality in Ireland. Modelling the more substantial but feasible food policy options, we estimated that CVD mortality could be reduced by up to 1250 deaths per year, representing a 25% decline in CVD mortality in Ireland.

Conclusions A considerable CVD burden is attributable to the excess consumption of saturated fat, trans-fat, salt and insufficient fruit and vegetables. There are significant opportunities for Government and industry to reduce CVD mortality through effective, evidence-based food policies. In public health we urgently need to better understand the levers of public policy change. We can then more effectively bring decades of research on CVD aetiology to bear on actually reducing the burden of disease in the population.