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### **High salt intake directly linked to stroke and cardiovascular disease**

Research: Salt intake, stroke, and cardiovascular disease: meta-analysis of prospective studies

Editorial: The case for population-wide salt reduction gets stronger

High salt intake is associated with significantly greater risk of both stroke and cardiovascular disease, concludes a study published on [bmj.com](http://bmj.com) today.

The link between high salt intake and high blood pressure is well established, and it has been suggested that a population-wide reduction in dietary salt intake has the potential to substantially reduce the levels of cardiovascular disease.

The World Health Organization recommended level of salt consumption is 5 g (about one teaspoon) per day at the population level, yet dietary salt intake in most Western countries is close to 10g per day (and much higher in many Eastern European countries).

Collaborative research conducted by Professor Pasquale Strazzullo at the University of Naples, Italy and Professor Francesco Cappuccio at the University of Warwick, UK analysed the results of 13 published studies involving over 170,000 people that directly assessed the relationship between levels of habitual salt intake and rates of stroke and cardiovascular disease.

Differences in study design and quality were taken into account to minimise bias.

Their analysis shows unequivocally that a difference of 5 g a day in habitual salt intake is associated with a 23% difference in the rate of stroke and a 17% difference in the rate of total cardiovascular disease.

Based on these results, the authors estimate that reducing daily salt intake by 5 g at the population level could avert one and a quarter million deaths from stroke and almost three million deaths from cardiovascular disease each year. Furthermore, because of imprecision in measurement of salt intake, these effect sizes are likely to be underestimated, say the authors.

These results support the role of a substantial population reduction in salt intake for the prevention of cardiovascular disease, they conclude.

This study is a useful and welcome addition to the medical literature, and strengthens the case for population-wide salt reduction, says Professor Lawrence Appel from Johns Hopkins University, in an accompanying editorial.

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