
Today, Public Health England (PHE) published a report on dietary salt intakes, based on an assessment of the sodium content of 24-hour urine collections made from May to September 2014. A random sample of 689 adults aged 19 to 64 years, designed to be representative of adults in England, took part in the study.

This report continues the series of urinary sodium surveys across the general adult population in United Kingdom countries since 2005/06. The results are used by government to monitor progress towards the recommended maximum salt intake for adults of no more than 6g per person per day.

The salt intake data from this survey and all previous surveys have been corrected to take account of changes over time in the laboratory analytical methods for sodium. These adjustments have resulted in slightly lower values for sodium concentration in urine from the earlier urinary sodium surveys and slightly higher values from the more recent surveys which used a different analytical method. This report uses these corrected data which are now comparable over time.

The report presents a revised assessment of the trend in estimated salt intake over time, which supersedes the previous trend analysis published in 2012. This revised assessment uses corrected sodium data as described above and is based on all urinary sodium data collected from adults in England between 2005/06 and 2014.

Key findings

- In 2014, mean estimated salt intake for adults aged 19 to 64 years was 8.0g/day. This compares with a corrected intake for the previous survey in 2011 of 8.5g/day.

- The revised trend analysis showed a downward trend in mean estimated salt intake between 2005/06 and 2014. Overall, mean estimated daily salt intakes fell by 0.9g/day, a relative reduction of 11%, over this period. Within this overall trend there was a statistically significant reduction of 0.5g/day (approximately 6%) between 2005/06 and 2008/09. Although the data suggested a further gradual decline between 2008/09 and 2014, this did not reach statistical significance.
The revised trend analysis shows a slightly shallower downward trend in salt intake than had been shown in the previously published trend analysis. This is due to the adjustment of sodium values to be comparable over time and also because the previous trend analysis included data collected in 2000/01 (see note 5 below).

Background notes

1) The Scientific Advisory Committee on Nutrition (SACN) published its report on Salt and Health in 2003 which endorsed the earlier recommendation of its predecessor, the Committee on Medical Aspects of Food and Nutrition Policy (COMA), that population salt intake should be reduced to no more than 6 grams/day for adults. Following this publication, the government began a programme of reformulation work with the food industry aimed at reducing the salt content of processed food products. Voluntary salt reduction targets were first set in 2006 for a range of food categories that contribute the most to the population’s salt intakes. These targets were revised in 2009 and 2011 to take account of industry achievements in salt reduction. In 2014 the Department of Health set new voluntary targets to be met by 2017, maintaining the focus on the food categories that contribute the most to the population’s salt intakes. Major retailers, manufacturers and eating out businesses are now working towards these targets.

2) Participants in the 2014 urinary sodium survey reported here were all aged 19 to 64 years, living in private households in England. They were recruited initially through a random digit telephone dialling method.

3) The 2014 urinary sodium survey was funded by Public Health England and carried out by NatCen Social Research and the Medical Research Council Human Nutrition Research (MRC HNR).

4) The sources of urinary sodium data from 2005/06 to 2014 that were used in the trend analysis were:
   a. England urinary sodium survey 2005/06
   b. UK urinary sodium survey 2008 (England participants only)
   c. England urinary sodium survey 2011
   d. NDNS years 1-4 2008/12 (England participants only)
   e. England urinary sodium survey 2014

   For the purpose of the trend analysis, individual data points were grouped into seven time points.

5) Urinary sodium data was also available from the National Diet and Nutrition Survey of adults 2000/01. However this dataset was not used in the trend analysis due to insecurities in the data from this survey and because it predated the start of the salt reduction programme.

6) Urinary sodium excretion was converted to salt using the equation: 17.1 mmol of sodium = 1g salt and assumes all of the sodium was derived from salt.

7) Laboratory methods for the measurement of sodium have evolved over time. Sodium excretion data were multiplied by the appropriate method-specific factor for each survey according to the analytical method used so as to make sodium data comparable over time. Application of these factors has resulted in slightly lower estimates of sodium concentration in urine collections assayed by flame photometry for surveys carried out in 2005/06 and 2008,
and slightly higher estimates in urine collections measured by ion-specific electrode technology – samples collected in the NDNS rolling programme (2008/13) and the 2011 and 2014 England surveys.

8) Results for estimated salt intake for previous urinary sodium surveys in 2005/06, 2008 and 2011 have been corrected using the factors as described above and revised results are presented in Appendix E of this report.

9) The trend analysis was carried out using log-transformed data and geometric means due to the skewed nature of the data so as to reduce the bias that would arise from comparing arithmetic means. However the salt intake figures for the 2014 survey and the revised figures from previous surveys presented in Appendix E are presented as arithmetic means in line with previous practice.

10) An identical survey carried out concurrently in Scotland will be published on 23 March by Food Standards Scotland. A similar survey has also been carried out in Northern Ireland and will be published later this year.