Salt Intake in Children: Increasing Concerns?

To the Editor:

We read with great interest the article by He and MacGregor1 concerning the effect of salt intake on blood pressure in children. Their meta-analysis shows that salt reduction in children causes a fall in blood pressure, which may have serious implications.

The authors state that current salt intake in children is largely unknown but is very likely to have increased in the last decades because of a rise in processed food intake. Data on 24-hour urinary sodium excretion, the best marker for sodium intake, have been scarce since the report of De Courcy et al2 that described sodium excretion in 17 children aged 4 to 6 years.

At the Department of Pediatric Nephrology of the VU University Medical Center in Amsterdam a database with all of the 24-hour urine collections has been maintained since 1992. Using this database, we analyzed the 24-hour urinary sodium excretion at entry in 5- to 10-year-old children in the period 1993–1995 as a marker for sodium intake and compared the results with the period 2003–2005 (Table). Our data show that salt intake has increased significantly during the last 10 years by >50%. Our findings of an increased salt intake in children in combination with the meta-analysis of He and MacGregor1 show the need for programs aiming at a reduction in salt intake to reduce future cardiovascular disease.

Disclosures

None.

Data Are Expressed as Mean (SD)

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Age, y</td>
<td>7.3 (1.4)</td>
<td>7.7 (1.6)</td>
<td>0.18</td>
</tr>
<tr>
<td>Weight, kg</td>
<td>24.3 (6.1)</td>
<td>28.1 (9.0)</td>
<td>0.002</td>
</tr>
<tr>
<td>eGFR, mL/min per 1.73 m²</td>
<td>93 (36)</td>
<td>90 (34)</td>
<td>0.6</td>
</tr>
<tr>
<td>Sodium excretion, mmol/d</td>
<td>65 (39)</td>
<td>101 (59)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Sodium excretion, mmol/kg per day</td>
<td>2.8 (1.7)</td>
<td>3.8 (2.3)</td>
<td>0.002</td>
</tr>
</tbody>
</table>

eGFR indicates estimated glomerular filtration rate based on 24-hour creatinine excretion.

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