Technical methods

TABLE I
RESULT OF REPEATED ESTIMATIONS OF SODIUM, POTASSIUM, AND CHLORIDE ON FIVE SAMPLES OF HUMAN URINE

<table>
<thead>
<tr>
<th>Sample</th>
<th>No. of Estimations</th>
<th>Na Mean ± S.D.</th>
<th>Coefficient of Variation (%)</th>
<th>K Mean ± S.D.</th>
<th>Coefficient of Variation (%)</th>
<th>CI Mean ± S.D.</th>
<th>Coefficient of Variation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14</td>
<td>90.1 ± 1.4</td>
<td>1.6</td>
<td>96.1 ± 1.3</td>
<td>1.4</td>
<td>129 ± 2.3</td>
<td>1.8</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>151 ± 3.7</td>
<td>2.5</td>
<td>74.2 ± 1.1</td>
<td>1.5</td>
<td>160 ± 3.0</td>
<td>1.9</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>116 ± 2.9</td>
<td>2.5</td>
<td>82.8 ± 1.1</td>
<td>1.4</td>
<td>125 ± 2.5</td>
<td>2.0</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>159 ± 2.5</td>
<td>1.6</td>
<td>47.9 ± 0.7</td>
<td>1.5</td>
<td>188 ± 3.7</td>
<td>2.0</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>116 ± 1.9</td>
<td>1.7</td>
<td>49.6 ± 0.8</td>
<td>1.6</td>
<td>110.7 ± 1.9</td>
<td>1.7</td>
</tr>
</tbody>
</table>

We wish to thank Professor M. L. Rosenheim for his support and Dr. E. J. Ross for critical discussion.
We are grateful to the British Council for financial support (J.K.D.) and Mr. Asta for the diagrams.

Estimation of hydroxyproline by the AutoAnalyzer1

R. A. GRANT  From the A.R.C. Institute of Animal Physiology, Babraham, Cambridge

ADDENDUM

In the procedure for elastin the second autoclaving with water is preferably replaced by a one-hour extraction with 0.1 N sodium hydroxide solution at 100°C. The alkaline extract is discarded and the residual elastin hydrolysed with 6 N hydrochloric acid in the usual way.

Since it has been found that the hydroxyproline content of aortic elastin varies with the site of origin a single factor based on the average hydroxyproline content does not give sufficient accuracy in the calculation. In the following calculation use the factors given in the table below.

\[
\% \text{elastin} = \% \text{hydroxyproline (remaining after autoclaving and alkali extraction)} \times \text{factor}
\]

REFERENCE


Since it has been found that the hydroxyproline content of aortic elastin varies with the site of origin a single factor based on the average hydroxyproline content does not give sufficient accuracy in the calculation. In the following calculation use the factors given in the table below.

\[
\% \text{elastin} = \% \text{hydroxyproline (remaining after autoclaving and alkali extraction)} \times \text{factor}
\]

TABLE

<table>
<thead>
<tr>
<th>Species</th>
<th>Arch</th>
<th>Mid-thoracic</th>
<th>Upper Abdominal</th>
<th>Sub-renal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheep</td>
<td>70</td>
<td>63</td>
<td>44</td>
<td>39</td>
</tr>
<tr>
<td>Pig</td>
<td>76</td>
<td>76</td>
<td>45</td>
<td>39</td>
</tr>
<tr>
<td>Goat</td>
<td>87</td>
<td>89</td>
<td>58</td>
<td>48</td>
</tr>
<tr>
<td>Human</td>
<td>88</td>
<td>88</td>
<td>80</td>
<td>69</td>
</tr>
</tbody>
</table>

Estimation of hydroxyproline by the AutoAnalyzer.

R A Grant

*J Clin Pathol* 1965 18: 686
doi: 10.1136/jcp.18.5.686

Updated information and services can be found at:
[http://jcp.bmj.com/content/18/5/686.citation](http://jcp.bmj.com/content/18/5/686.citation)

**Email alerting service**

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

**Notes**

To request permissions go to:
[http://group.bmj.com/group/rights-licensing/permissions](http://group.bmj.com/group/rights-licensing/permissions)

To order reprints go to:
[http://journals.bmj.com/cgi/reprintform](http://journals.bmj.com/cgi/reprintform)

To subscribe to BMJ go to:
[http://group.bmj.com/subscribe/](http://group.bmj.com/subscribe/)