Iodine status in early pregnancy: ethnic variations
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Background – Iodine deficiency is re-emerging as a potential public health problem in Australia (1-3). Poor iodine status in pregnancy is associated with impaired fetal development, both mental and physical. Furthermore, there may be significant ethnic variation in maternal iodine status.

Objective - To describe maternal iodine status in a multiethnic Australian population.

Design – Cross-sectional. Urinary iodine (UI) concentration was measured in spot urine samples, collected in early pregnancy, from Vietnamese, Indian/Sri Lankan and Caucasian women who participated in a Downs Syndrome Screening Program over 1999-2001 in Melbourne.

Outcomes -

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Median UI µg/L</th>
<th>% UI below 50µg/L</th>
<th>WHO Iodine Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian (n=178)</td>
<td>49.0</td>
<td>50.6</td>
<td>Moderate Deficiency</td>
</tr>
<tr>
<td>Vietnamese (n=200)</td>
<td>56.5</td>
<td>38.5</td>
<td>Mild Deficiency</td>
</tr>
<tr>
<td>Indian/Sri Lankan (n=181)</td>
<td>53.0</td>
<td>47.0</td>
<td>Mild Deficiency</td>
</tr>
</tbody>
</table>

1 P=0.003 cf Caucasian; 2 P=0.15 cf Caucasian

Conclusion - Consistent with recent studies in non-pregnant individuals, these women were mildly to moderately iodine deficient according to World Health Organisation (WHO) criteria. The findings may have implications for fetal development and for public health advice.