An exploratory study of maternal iron status in pregnancy and childhood wheeze and atopy

Online supplemental tables

Bright I Nwaru1, Helen Hayes2, Lorraine Gambling2, Leone CA Craig3, Keith Allan4, Nanda Prabhu4, Steven W Turner4, Geraldine McNeill3, Maijaliisa Erkkola5, Anthony Seaton6, Harry J McArdle2, Graham Devereux4

1Allergy & Respiratory Research Group, Centre for Population Health Sciences, University of Edinburgh, UK
2 Rowett Institute of Nutrition and Health, University of Aberdeen, UK
3Public Health Nutrition Group, University of Aberdeen, UK.
4Child Health, University of Aberdeen, UK.
5Division of Nutrition, Department of Food and Environmental Sciences, University of Helsinki, Finland
6Department of Environmental and Occupational Medicine, University of Aberdeen, UK.

Corresponding address:
Graham Devereux
Child Health
Royal Aberdeen Children’s Hospital
Aberdeen. AB25 2ZG
United Kingdom
Tel +44 1224 438476. Fax +44 1224 438469
E mail g.devereux@abdn.ac.uk
Table S1 Unadjusted association between maternal sufficiency of ferritin at 11 weeks gestation and at birth and the longitudinal development of asthma and allergic outcomes up to 10 years

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Serum ferritin at 11 weeks</th>
<th>Serum ferritin at birth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deficient (&lt;15 ug/ml)</td>
<td>Sufficient (≥ 15 ug/ml)</td>
</tr>
<tr>
<td></td>
<td>Reference (n = 80)</td>
<td>Reference (n = 27)</td>
</tr>
<tr>
<td>Wheeze in the past year, OR (95% CI)</td>
<td>Reference 1.38 (0.71-2.67)</td>
<td>Reference 0.86 (0.35-2.12)</td>
</tr>
<tr>
<td></td>
<td>P-value 0.342</td>
<td>P-value 0.739</td>
</tr>
<tr>
<td>Wheeze without cold in past year, OR (95% CI)</td>
<td>Reference 1.19 (0.49-2.86)</td>
<td>Reference 0.77 (0.23-2.57)</td>
</tr>
<tr>
<td></td>
<td>P-value 0.701</td>
<td>P-value 0.669</td>
</tr>
<tr>
<td>Doctor-diagnosed eczema, OR (95% CI)</td>
<td>Reference 0.92 (0.45-1.90)</td>
<td>Reference 3.03 (1.26-7.31)</td>
</tr>
<tr>
<td></td>
<td>P-value 0.825</td>
<td>P-value 0.014</td>
</tr>
<tr>
<td>Doctor-diagnosed hay fever, OR (95% CI)</td>
<td>Reference 1.14 (0.48-2.70)</td>
<td>Reference 1.18 (0.37-3.78)</td>
</tr>
<tr>
<td></td>
<td>P-value 0.760</td>
<td>P-value 0.783</td>
</tr>
<tr>
<td>Skin prick test positivity to any allergen, OR (95% CI)</td>
<td>Reference 0.86 (0.37-2.01)</td>
<td>Reference 1.81 (0.63-5.18)</td>
</tr>
<tr>
<td></td>
<td>P-value 0.737</td>
<td>P-value 0.271</td>
</tr>
<tr>
<td>Doctor-diagnosed asthma, OR (95% CI)</td>
<td>Reference 1.06 (0.45-2.50)</td>
<td>Reference 1.64 (0.58-4.63)</td>
</tr>
<tr>
<td></td>
<td>P-value 0.886</td>
<td>P-value 0.346</td>
</tr>
<tr>
<td>PEF, coefficient (95% CI)</td>
<td>Reference 0.09 (-0.12-0.30)</td>
<td>Reference -0.08 (-0.36-0.20)</td>
</tr>
<tr>
<td></td>
<td>P-value 0.389</td>
<td>P-value 0.567</td>
</tr>
<tr>
<td>FEV1, coefficient (95% CI)</td>
<td>Reference -0.01 (-0.17-0.16)</td>
<td>Reference -0.11 (-0.32-0.09)</td>
</tr>
<tr>
<td></td>
<td>P-value 0.941</td>
<td>P-value 0.289</td>
</tr>
<tr>
<td>FVC, coefficient (95% CI)</td>
<td>Reference 0.01 (-0.13-0.15)</td>
<td>Reference 0.04 (-0.015-0.23)</td>
</tr>
<tr>
<td></td>
<td>P-value 0.884</td>
<td>P-value 0.669</td>
</tr>
<tr>
<td>Outcomes</td>
<td>haemoglobin at 11 weeks</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>-------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td></td>
<td>Deficient (&lt;10.5 g/dl)</td>
<td>Sufficient (≥10.5 g/dl) n = 151</td>
</tr>
<tr>
<td>Wheeze in the past year, OR (95% CI)</td>
<td>Reference</td>
<td>*</td>
</tr>
<tr>
<td>P-value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheeze without cold in past year, OR (95% CI)</td>
<td>Reference</td>
<td>*</td>
</tr>
<tr>
<td>P-value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor-diagnosed eczema, OR (95% CI)</td>
<td>Reference</td>
<td>*</td>
</tr>
<tr>
<td>P-value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor-diagnosed hay fever, OR (95% CI)</td>
<td>Reference</td>
<td>*</td>
</tr>
<tr>
<td>P-value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin prick test positivity to any allergen, OR (95% CI)</td>
<td>Reference</td>
<td>*</td>
</tr>
<tr>
<td>P-value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor-diagnosed asthma, OR (95% CI)</td>
<td>Reference</td>
<td>*</td>
</tr>
<tr>
<td>P-value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEF, coefficient (95% CI)</td>
<td>Reference</td>
<td>0.14 (-0.53-0.80)</td>
</tr>
<tr>
<td>P-value</td>
<td></td>
<td>0.685</td>
</tr>
<tr>
<td>FEV1, coefficient (95% CI)</td>
<td>Reference</td>
<td>0.09 (-0.51-0.69)</td>
</tr>
<tr>
<td>P-value</td>
<td></td>
<td>0.773</td>
</tr>
<tr>
<td>FVC, coefficient (95% CI)</td>
<td>Reference</td>
<td>0.23 (-0.25-0.70)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.350</td>
</tr>
</tbody>
</table>

*Due to small sample models did not converge