



Protecting and improving the nation's health

## National Diet and Nutrition Survey Rolling Programme (NDNS RP): Supplementary report: blood folate results for the UK as a whole, Scotland, Northern Ireland (Years 1 to 4 combined) and Wales (Years 2 to 5 combined)

### Corrections required to thresholds used to define biochemical deficiency of red blood cell folate and serum total folate

The above report on the folate status of the UK population, based on data collected in the NDNS, was published in March 2015. In this report, thresholds agreed by a WHO consultation in 2008<sup>1</sup>, and based on metabolic indicators such as raised plasma homocysteine concentration, were used to define biochemical folate deficiency. The thresholds used in the report were:

- less than 10nmol/L (4ng/mL) for serum total folate;
- less than 340nmol/L (151ng/mL) for red blood cell folate

Tables 1-4 (and also Tables G.1-G.4) in the report, present the percentages falling below these thresholds for each age/sex group in each UK country.

We have recently become aware that these thresholds, published by the WHO, were set using blood folate data based on different laboratory assays to those used to analyse NDNS samples. Measurements of blood folate are specific to the assay method and the laboratory used; therefore thresholds need to be appropriate to the assay method or to have been adjusted for the assay method used.

We are working with the NDNS contractors to determine the appropriate thresholds to use for the NDNS folate assays. Once these are established, we will be able to recalculate the

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<sup>1</sup> WHO. Conclusions of a WHO technical consultation on folate and vitamin B12 deficiencies. Food and Nutrition Bulletin. 2008; 29. S238–S244

proportion of each population age/sex group falling below the thresholds. We expect that the adjusted thresholds will be higher than the original thresholds so the revised estimates of the percentages falling below the thresholds for biochemical deficiency based on the homocysteine criterion will be higher than the published values.

We hope to be in a position to publish revised values on the prevalence of biochemical folate deficiency by autumn 2016.

Please note that the estimates of serum total folate and red blood cell folate concentrations presented in the report are unaffected by this thresholds issue. The only results affected are the estimates of prevalence of low folate status, based on the thresholds above.

Public Health England  
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