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**A preliminary study on serum and red cell folate concentrations of anaemic and non-anaemic subjects**

Folate deficiency is known to cause serious health problems such as birth defects, low birth weight, pre-term delivery, macrocytic anaemia, etc. The objective of this study was to study the folate levels in anaemic (macrocytic) and non-anaemic subjects.

To achieve the above, a pilot study was carried out to find the normal range among the Sri Lankans. Blood from 50 anaemic and 50 apparently normal individuals was collected and analysed for folate concentration in the serum and the red cell using a microbiological assay system.

In the case of normal subjects, the serum folate ranged between 3.5-16ng/ml, with a mean value of 8.5ng/ml. Those who had levels close to the lower limit of the range had poor dietary habits, which most likely led to the relatively low folate level. In 44 anaemic subjects, the range varied between 1.4 and 3 ng/dl. The 6 who had normal levels were on treatment with folic when their blood was drawn. But their red cell folate levels were below the normal range.

Even though the serum folate level attained normalcy in just 2 days of starting folate therapy, the red cell folate levels took over 2 weeks to attain normalcy. In addition to dietary deficiency, other causes of folate deficiency in the anaemics included malignancies, epilepsy, chronic diarrhoea and pregnancy.