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The following abstract should have appeared in the *Archives*, October 1975, p. 825, in the Proceedings of the British Paediatric Association in place of the title 'Effect of gestational age and intrauterine nutrition . . .' by Scott *et al.*, which was published in error.

Nutritional value of whey protein and curd protein in the low birthweight baby. H. M. Berger, P. H. Scott, Caroline Kenward, P. Scott, and B. A. Wharton. Birmingham.

Dogs and rats thrive better on a milk-containing whey as well as curd protein probably due to its higher cystine content, but the situation in humans is unclear. It is relevant to re-examine this problem since demineralized whey formulae with curd/whey ratios similar to those in breast milk, are now available (e.g. S26, Premium). We have therefore studied the nutritional progress of 29 low birthweight babies (mean gestation 36 weeks, birthweight 2 kg) receiving SMA (mainly curd protein) and 28 of similar size and gestation receiving modified S26 (curd and whey protein, sodium and potassium content similar to SMA).

Babies on the curd and whey formula at 21 days were bigger (weight 2.4 ± 0.13 , cf 2.3 ± 0.2 kg, $P < 0.01$; length 48 ± 1 , cf 47 ± 1 cm, $P < 0.05$). The differences were more marked in the preterm babies. The curd and whey group had a lower plasma ribonuclease activity on day 7 (1.02 ± 0.2 , cf 1.38 ± 0.4 units

$P < 0.01$), and excreted less nitrogen (N) due to the urea fraction, and relatively more inorganic sulphate (S) (day 10 urinary urea 52 ± 9 , cf 75 ± 22 , $P < 0.05$; S/N ratio 0.17 ± 0.03 , cf 0.10 ± 0.04 , $P < 0.01$).

Nitrogen balance studies performed towards the end of the study period gave similar results, and no differences were found in hair growth, midarm muscle circumference, fat deposition, and plasma levels of sulphur amino acids, albumin, immunoglobulins, urea, and triglyceride. However, the curd and whey group did have lower plasma transferrin (day 19, 163 ± 32 , cf 205 ± 37 , $P < 0.01$) and β lipoprotein (day 10, 41 ± 17 , cf 50 ± 13 , $P < 0.05$).

Overall, these results suggest that a curd and whey formula has advantages in the protein nutrition of low birthweight babies, especially the preterm ones, and does not provoke any more immunological reaction than a curd one alone. These advantages were marginal, however, so that the major argument for use of such formulae is their reduced mineral content, particularly the lower phosphate and lower renal solute load.