COMMENT ON KULKARNI ET AL.

Maternal Lipids Are as Important as Glucose for Fetal Growth: Findings From the Pune Maternal Nutrition Study. Diabetes Care 2013;36:2706–2713

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We read with great interest the article by Kulkarni et al. (1), which shows maternal fasting glucose, total cholesterol, and triglyceride but not HDL cholesterol to be associated with neonatal birth size. These findings, however, are not consistent with many other related studies, including one from India (2–4).

Kulkarni et al. probably attribute the absence of the relationship between HDL cholesterol and birth size to low baseline prepregnancy BMI of their subjects. The authors themselves allude to a study by Misra et al. (2), who found a significant inverse association between gestational age adjusted birth weight and HDL cholesterol during pregnancy in overweight/obese women. But no significant effect was found in normal weight women. In contrast, low levels of HDL cholesterol were associated with increased risk of high birth weight independent of maternal BMI in a study by Clausen et al. (3). Similar findings were also documented in an Indian study from a tertiary care center on univariate analysis (4). However, multivariate analysis did not corroborate the same.

Moreover, the Pune Maternal Nutrition Study was conducted nearly two decades ago, and comparison of the results in a similar cohort in the present scenario might show different results as in other studies we have referred to. The clinical anthropological profile and lipid characteristics of the same subjects in current scenario may also give interesting insights into the fuel-growth dynamics in a rural poorly nourished background. This calls for further large-scale studies looking into the lipid–birth weight relationships across different BMI groups in pregnant mothers of various ethnicities.

Duality of Interest. No potential conflicts of interest relevant to this article were reported.

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