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Maternal iron supplementation in pregnancy and asthma in the offspring: follow-up of a randomised trial in Finland

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Iron supplementation in pregnancy may reduce the risk of asthma in the offspring <http://bit.ly/2UHMfid>

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To the Editor:

Evidence for the hypothesis that prenatal nutrition may influence the risk of childhood respiratory and atopic disorders has strengthened in recent years. For example, randomised controlled trials (RCTs) have suggested that maternal supplementation with vitamin D or fish oil in pregnancy could prevent early childhood wheezing and asthma in the offspring [1, 2]. Another nutrient of interest is iron. Animal experiments have implicated iron in fetal airway development [3]. In two UK population-based birth cohorts, using different approaches, we have found evidence suggesting that lower maternal iron levels in pregnancy may increase the risk of wheezing, atopy and lower lung function in the offspring [4–7]. However, the possibility that unmeasured or residual confounding might explain these observational findings cannot be ruled out. A study in the USA reported that maternal anaemia was associated with an increased risk of childhood asthma in offspring of mothers with asthma, but not in those whose mothers did not have asthma [8], although we did not confirm such effect modification [5].