

# Improving pregnancy outcome in obese women: the UK Pregnancies Better Eating and Activity randomised controlled Trial

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†In memoriam

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the National Institute for Health Research (NIHR) Programme Grants for Applied Research core group of methodological experts (2011–15), and of the NIHR Health Services and Delivery Research Programme Commissioning Board (2012–15) and Stephen C Robson was a Medical Research Council/NIHR Efficacy and Mechanism Evaluation board member (2012–15).

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## Plain English summary

### **The UPBEAT trial**

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## Plain English summary

One in five UK women of childbearing age is obese. Obese women are more likely to have problems in pregnancy, including gestational diabetes mellitus (GDM), and their babies often grow too large, leading to complications during labour and delivery. A way to prevent these problems may be for women to change their diet and to take more exercise. Helped by women who were pregnant and obese, we developed an individually tailored 'lifestyle' programme [the UK Pregnancies Better Eating and Activity Trial (UPBEAT) intervention]. The advice was aimed at preventing GDM and stopping babies growing too large by encouraging women to make specific changes to their diet and taking more physical activity (PA), as opposed to focusing on reducing pregnancy weight gain, as other studies have done. In a small 'pilot' study the programme helped to change the women's diet but was not very effective in changing PA. We then tested the programme in 1555 obese pregnant women from UK cities. Half took part in the programme on top of normal pregnancy care over an 8-week period, and the other half had normal pregnancy care. All were tested for GDM. Although there was considerable improvement in diet, GDM was not reduced and there was no benefit in terms of reduced NHS costs. There were fewer large babies than we expected; this may be because everyone had a diabetes mellitus test and were appropriately treated if they had developed diabetes mellitus. We conclude that the UPBEAT programme, which was more intense than previous lifestyle programmes, did not prevent GDM in obese pregnant women or large-for-gestational-age infants and that other strategies may be more effective.



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