

“Regular Exercise During Pregnancy to Prevent Gestational Diabetes: A Randomized Controlled Trial”

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1. In this randomized controlled trial, describe how randomization was allocated. Why were blocks of 30 used? When would you recommend block allocations, and why?
2. The authors randomized the patients at 18–22 weeks of gestation. Discuss this timing for an exercise intervention. What are the benefits of having the intervention at this time, rather than earlier or later?
3. The primary outcomes were development of gestational diabetes and insulin resistance estimated by the homeostasis model assessment method (HOMA-IR). Why were these two selected for the primary outcome?
4. The authors assumed a gestational diabetes mellitus (GDM) prevalence of 9% in the control group in their power calculation. How does this compare to your GDM prevalence? Was this an accurate estimation for their population? If not, how does that affect the findings of the study?
5. The study was conducted in healthy pregnant women with a normal body mass index (BMI). Only 10% had a prepregnancy BMI greater than 27 kg/m²; how generalizable are their findings to your patients? If you were to undertake such a study in your patient population, do you think the conclusions would be different? Why or why not?
6. Given that the study population was predominately of a normal BMI and over half of the women reported regular exercise prior to enrollment (Table 1), how might this affect the intervention and the findings? Is it possible that the intervention might work in a “less fit” population? Why or why not?
7. The authors note that only 55% of the intervention group members were able to follow the recommended exercise protocol. How might this affect the findings?
8. Review the statistical analysis. What does “intention-to-treat” mean? Why is this important for the analysis?
9. Review the College recommendations on exercise in pregnancy ([Exercise during pregnancy and the postpartum period. ACOG Committee Opinion No. 267. American College of Obstetricians and Gynecologists. Obstet Gynecol 2002;99:171–3](#)). Do the results of this study warrant any changes to the recommendations?
10. Describe how you counsel your patients regarding exercise in pregnancy. What are the benefits and risks you describe?
11. Survey the journal club participants: how many routinely discuss exercise with their patients, and what do they recommend? Will the results from this trial change your practice?