

PLAIN ENGLISH SUMMARY: ADDRESSING PRE-PREGNANCY GESTATIONAL DIABETES

Scope

Diabetes UK is seeking research proposals to test whether significant weight loss before pregnancy can prevent gestational diabetes (GDM) in women who have already experienced GDM in a previous pregnancy. The aim is to run a feasibility study—a smaller, pilot version of a larger trial—to gather evidence on how effective this approach might be.

Need

GDM is a common and serious condition, affecting at least 5% of pregnancies in the UK. It increases the risk of complications for both mother and baby, such as large babies, difficult deliveries, and the need for neonatal intensive care. Women with GDM are also more likely to have higher healthcare costs. The main risk factor for GDM is higher body weight, and the condition is closely linked to the development of type 2 diabetes. Research shows that the changes in metabolism that lead to GDM start before pregnancy, so losing weight before conception could be the key to prevention. Previous studies have shown that weight loss can reverse some of the underlying problems, but only if it happens before pregnancy begins. There is a clear need to test whether this approach works in practice for women at high risk.

Importance

If this approach is effective, it could have a major impact on the health of mothers and babies, reducing complications and healthcare costs. Larger studies would be required to influence future guidelines and healthcare practices, as current recommendations do not specify the level of weight loss needed to prevent GDM. The research could help shape new strategies for preventing diabetes and improving pregnancy outcomes, not just for women with a history of GDM but potentially for all women planning a pregnancy. The study also emphasises the importance of involving patients and the public in the research process, and of considering equity, diversity, and inclusion in project design. Ultimately, this work could lead to better health for families and inform national policy.

What is being asked?

The research should use proven dietary methods that have helped people lose 10–15 kg in other studies and should involve women who are planning a future pregnancy after having GDM before. The study should be designed as a feasibility study, ideally across multiple centers, and should collect data on how many women are willing to participate, how much weight they lose, and what happens in their subsequent pregnancies.