

## **Lifestyle modification as possible prevention of gestational diabetes**

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**Background:** Gestational Diabetes Mellitus (GDM) is a form of diabetes that usually occurs between 24<sup>th</sup> and 28<sup>th</sup> weeks of pregnancy. Several studies have shown that the prevalence of gestational diabetes has been increased over the last two decades.

**Aim:** The purpose of this systematic review was to examine the effect of lifestyle modifications before and during pregnancy for the prevention of developing GDM.

**Method:** The present systematic review included 12 research studies that were published between 2010 and 2020 identified from Pubmed database. The key-words used, were: gestational diabetes, lifestyle modification, prevention and risk factors.

**Results:** According to one study, a number of dietary factors was associated with the risk of glucose intolerance during pregnancy. Obesity seems to increase the incidence of GDM with acute and long term complications in both mother and offspring. Although, a limited number of studies have examined the association between dietary factors and the risk of developing GDM, health dietary habits and counselling are strongly related to preventing GDM. In four studies, it is evident that physical activity can influence glucose homeostasis. Therefore exercise is related to low the risk of GDM. Three studies have shown that glucose homeostasis seems to increase when intensity and duration of activity are longer. In another study, the impact of preconceptional physical activity has shown low risk of GDM either in an ethnically or socio-economically diverse population.

**Conclusion:** This systematic review has demonstrated the importance and effectiveness of lifestyle modifications in decreasing the chance of developing GDM. Therefore, nurses should encourage women for lifestyle modification even before conception.