

**Name of Journal:** *World Journal of Diabetes*

**Manuscript NO:** 62713

**Manuscript Type:** REVIEW

**Maternal obesity as a risk factor for developping diabetes in offspring: An epigenetic point of view**

Epigenetic programming of type 2 diabetes

### Abstract

According to the Developmental Origin of Health and Disease (DOHaD) concept, the risk of many age-related diseases is not only determined by genetic and adult lifestyle factors but also by factors acting during early development. In particular, maternal obesity and neonatal accelerated growth predispose offspring to overweight and type 2 diabetes (T2D) in adulthood. This concept mainly relies on developmental plasticity of adipose tissue and pancreatic b-cells programming in response to suboptimal *milieu* during the perinatal period. These changes result in unhealthy hypertrophic adipocytes

### Match Overview

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## Maternal obesity as a risk factor for early childhood type ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6448943>

In mothers without **diabetes**, **maternal obesity** was a significant risk factor for type 1 **diabetes** in the offspring ( $p = 0.04$ ). A child had an increased risk of **developing** type 1 **diabetes** if the mother had been obese in early pregnancy (crude OR 1.20; 95% CI 1.05, 1.38; adjusted OR 1.18; 95% CI 1.02, 1.36).

Cited by: 11

Author: Nina Lindell, Annelie Carlsson, Ann Josef...

Publish Year: 2018

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## Maternal Environment and the Transgenerational ... - Diabetes

<https://diabetes.diabetesjournals.org/content/60/7/1849> ▾

Jul 01, 2011 · The prevalence of **obesity** continues to increase worldwide and represents one of the most pressing public health issues due to its associated morbidity, mortality, and health care...

**Cited by:** 335

**Author:** Dana Dabelea, Tessa Crume

**Publish Year:** 2011

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**Cited by:** 2
 **Author:** Emmi Helle, James R. Priest  
**Publish Year:** 2020

## Maternal obesity and developmental priming of risk of ...

<https://www.sciencedirect.com/science/article/pii/B9780128179215000163>

Jan 01, 2020 · **Maternal obesity** is associated with **increased risk** of **pregnancy complications**, including **gestational diabetes**. In addition, **maternal obesity** is recognized to be associated with increased birth weight, neonatal adiposity, increased risk of **childhood obesity, diabetes**, and metabolic risk in the offspring, independent of the effects of **gestational diabetes** or **maternal hyperglycemia**.

**Cited by:** 1
 **Author:** Ronald Ching Wan Ma, Peter D. Gluckm...  
**Publish Year:** 2012

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## JCI Insight - Gestational diabetes and maternal obesity ...

<https://insight.jci.org/articles/view/122572>