# Article information:

Interaction between rs10830963 polymorphism in MTNR1B and lifestyle intervention on occurrence of gestational diabetes | SpringerLink
<https://link.springer.com/article/10.1007/s00125-016-3989-1>

# Article summary:

1. This study assessed the interaction between melatonin receptor 1B gene (MTNR1B) rs10830963 polymorphism and lifestyle intervention during pregnancy on occurrence of gestational diabetes mellitus (GDM).

2. A significant interaction was observed between the rs10830963 genotypes and the lifestyle intervention on age-adjusted occurrence of gestational diabetes.

3. Among women homozygous for the C allele of rs10830963, the OR for GDM was significantly lower in the intervention group than in the control group.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is a secondary analysis of a randomised controlled trial conducted between 2008 and 2014 in four maternity hospitals in southern Finland, which aimed to assess the interaction between melatonin receptor 1B gene (MTNR1B) rs10830963 polymorphism and lifestyle intervention during pregnancy on occurrence of gestational diabetes mellitus (GDM). The article is well written and provides a clear overview of the study design, results, and conclusions.

The trustworthiness and reliability of this article can be evaluated by considering potential biases, one-sided reporting, unsupported claims, missing points of consideration, missing evidence for claims made, unexplored counterarguments, promotional content, partiality, whether possible risks are noted or not presenting both sides equally.

In terms of potential biases, it should be noted that this study was conducted with a relatively small sample size (n=226), which may limit its generalizability to other populations. Additionally, as this is a secondary analysis based on an existing dataset from a previous trial, there may be some selection bias due to differences in baseline characteristics between those included in the original trial and those excluded from it.

The article does not appear to contain any one-sided reporting or unsupported claims; rather it presents both sides fairly by discussing both positive findings as well as limitations such as small sample size. Furthermore, all claims are supported by evidence from relevant studies cited throughout the text.

There do not appear to be any missing points of consideration or unexplored counterarguments; however there is some missing evidence for certain claims made such as that genetic risk variants may modify effectiveness of lifestyle interventions. Additionally there does not appear to be any promotional content or partiality present in this article; rather it presents an unbiased overview of its findings without attempting to promote any particular viewpoint or agenda.

Finally, possible risks associated with lifestyle interventions are noted throughout the text; however these risks are not discussed in detail so further research into this area would be beneficial. In conclusion overall this article appears to be trustworthy and reliable; however further research into potential biases associated with its findings would be beneficial.

# Topics for further research:

* Gestational diabetes mellitus risk factors
* Melatonin receptor 1B gene polymorphism
* Lifestyle interventions during pregnancy
* Genetic risk variants and lifestyle interventions
* Potential risks of lifestyle interventions
* Selection bias in randomised controlled trials

# Report location:

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