



Vitamin D status in pregnant women in Iceland and the association with gestational diabetes mellitus

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Aim

- 1) To evaluate the vitamin D status in pregnant women in Iceland
- 2) To assess whether supplementation is associated with vitamin D status
- 3) To assess possible seasonal variations in vitamin D status
- 4) To examine whether vitamin D status in pregnant women in Iceland is associated with risk of gestational diabetes mellitus





Methods

- Based on a larger study named PREgnant Women in ICEland (PREWICE) (VSN-17-057)
- All pregnant women who came for an ultrasound scan (in gestational weeks 11-14) at Landspítali between October 2017 – March 2018 were offered to participate in the study
 - 1350 women fulfilled participation requirements and 1015 agreed to participate (75%)
 - All women answered a dietary screening questionnaire
 - 942 women gave blood sample to determine vitamin D status (serum 25(OH) vit D concentration)
 - Only data from these participants will be processed





Results (aims 1 and 2)

- The mean vitamin D concentration was 63 ± 24 nmol/L
 - 70% had concentration ≥ 50 nmol/L (adequate)
 - 25% between 30-49.9 nmol/L (insufficient)
 - 5% < 30 nmol/L (deficiency)
- Supplements containing vitamin D were used daily by 77% of the women
 - 25% of them had vitamin D concentration < 50 nmol/L
- 12% claimed they never or rarely used supplements containing vitamin D
 - Mean vitamin D concentration was 45 ± 17 nmol/L
 - Nearly 70% < 50 nmol/L and 15% < 30 nmol/L





Results and discussion

- Results related to aims 3 and 4 will be available in May
- The study has already provided new information on Vitamin D status in pregnant women in Iceland and adherence to guidelines on vitamin D supplementation
- Further analysis of the data will provide information on whether insufficient vitamin D status is related to increased risk of gestational diabetes in the population studied

