# NUTRIENT INTAKE AT EARLY PREGNANCY AND LATER GESTATIONAL DIABETES

Association in a high risk pregnant women

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## **Background**

 Dietary constituents associated with development of GDM need to be established

## **Participants**

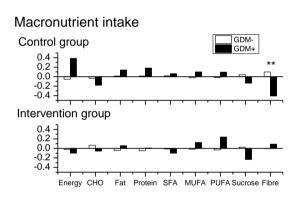
- N=231
- Pregnant women
- BMI≥30kg/m2 and/or a history of GDM

### **Methods**

- 3-day estimated food record
- 75g oral glucose tolerance test
- Statistics: Student's t-test, chi-square test, logistic regression analysis

#### **Results**

 Prevalence of GDM 17% (40/230), from which 60% had a history of GDM



#### Micronutrient intake

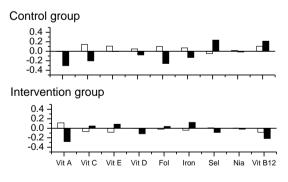


Figure 1. Standardized nutrient intake in women who developed gestational diabetes (GDM+) and who did not develop GDM (GDM-) separately in control and intervention groups. The values are standardized energy densities or percents from total energy (energy-yielding nutrients and fibre).

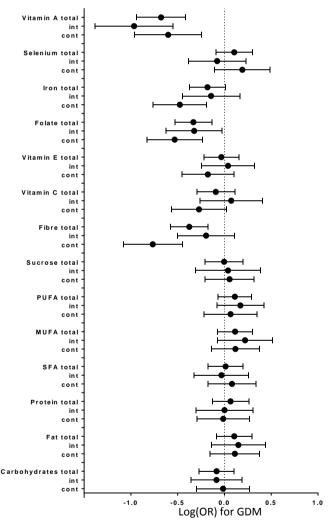


Figure 3. Adjusted\* log(OR) and standard error for developing GDM by 1 standard deviation increase in intake of the nutrient. The values are standardized energy densities or percents from total energy (energy-yielding nutrients and fibre).

\*for age, body mass index, history of GDM, and group assignment

#### **Conclusions**

 Intake of vitamin A, dietary fibre, folate, and possibly iron are associated with development of GDM.