Gestational diabetes mellitus (GDM) is defined as “carbohydrate intolerance of varying severity with onset or first recognition during pregnancy”. GDM is associated with pregnancy and neonatal complications (for example gestational hypertension, preeclampsia, large for gestational age, Erb’s palsy) and the women with GDM have a risk for later type 2 diabetes. GDM is also considered a risk for later cardiovascular disease.

Controversies regarding gestational diabetes have mainly concerned diagnostic criteria, diagnostic testing and screening methods. The rise in GDM prevalence due to the obesity epidemic in the world has also consequences for the health care systems.

In this thesis we have evaluated different aspects on GDM which has given us clinically relevant information regarding screening methods, the role of ethnicity and women’s later cardiovascular morbidity after GDM. Some aspects has been clarified, but there are many unanswered questions in the field of GDM.