Conclusions In this cohort, the frequency of high caffeine consumption was low; however, it was independently associated with LBW, but not with preterm birth. Supported: FAPESP, FAEPAA.

Method Data were obtained from the PMSI (medical Information system program) and the SNIBRAM (inter-regimens national system of information) of the French health insurance. All the childbirths and the terminations of pregnancy (TOP) after 22 weeks were selected. The mother’s diabetic status was determined by an algorithm based on the consumption of antidiabetics and hospitalisation diagnoses before and during the pregnancy. An identifier in the PMSI links mothers and children. Macrosomia was defined as a birth weight (BW) > 4 kg or > 90th percentile for gestational age.

Results 806 579 childbirths /TOP > 22 weeks were identified in the PMSI. The motherchild chaining was obtained for 474 614 births. 16.7% of the newborn had BW >4 kg in type 1 diabetes (T1D), 13.4% in type 2 diabetes (T2D), 9.0% in GD, and 6.6% in the normal population. 42.5% (n = 354) of the newborn had a BW >90th percentile in T1D, 30.4% (n = 348) in T2D, 15.7% (n = 5096) in GD and 9.4% in the absence of diabetes. The OR compared with the absence of diabetes were respectively 7.0 [6.1–8.0], 3.9 [3.4–4.4] and 1.7 [1.6–1.8]. The median BW was significantly higher whatever the term of birth in cases of GD compared to the normal population.

Conclusion The risk of macrosomia is the highest in case of T1D, but it remains in case of GD, although it is lower.