## Overweight and Obesity in twin pregnancies

In 2009, the Institute of Medicine (IOM, now "National Academy of Medicine") in the United States (US) introduced trimester specific guidelines for maternal weight gain during pregnancy. However, guidelines for twin pregnancies were only provisional and did not include recommendations on weekly weight gain.

The effects of overweight, obesity and excessive maternal weight gain in singleton pregnancies include higher rates of preeclampsia, gestational diabetes and caesarean delivery as well as adverse long-term outcomes for mothers and their offspring. <sup>2,3</sup> However, research is needed on gestational weight gain and its effect in twin pregnancies. This was emphasized by a systematic review in 2014.<sup>4</sup>

## Our goals are

- 1) To describe the rates of overweight, obesity and weight gain in twin pregnancies using data from a perinatal registry in Hessen, Germany between 2000 and 2015
- 2) To analyze the influence of social and economic factors on maternal body mass index (BMI) and gestational weight gain
- 3) To report the rates of (adverse) short-term outcomes for mothers and newborns during the considered period of time
- 4) To examine the influence of maternal BMI and gestational weight gain on maternal and neonatal outcomes

We intend to provide helpful information for counselling pregnant women with twins on optimal weight gain during a twin pregnancy. The data can not only be used to create recommendations for weight gain in twin pregnancies but also to raise awareness of the risks of insufficient and excessive gestational weight gain among women of childbearing age.



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## References

- 1)Rasmussen et al., 2009: Weight Gain During Pregnancy: Reexamining the Guidelines. National Academies Press (US). Washington (DC)
- 2) Arabin, B et al., 2014: Overweight and Obesity before, during and after Pregnancy: Part 2: Evidence-based Risk Factors and Interventions. In: Geburtshilfe und Frauenheilkunde 74 (7), S. 646–655.
- 3) Melchor et al., 2019: Effect of maternal obesity on pregnancy outcomes in women delivering singleton babies: a historical cohort study. In: Journal of perinatal medicine.
- 4) Bodnar et al., 2014: Gestational weight gain in twin pregnancies and maternal and child health: a systematic review. In: *Journal of Perinatology : official journal of the California Perinatal Association* 34 (4)