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# Changes in placental size during Ramadan.

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## Abstract:

**BACKGROUND:** Placental growth responds to maternal influences. Ramadan is an annual period of day-time fasting during which people in Saudi Arabia, including pregnant women, change their diets and physical activity. Little is known about the effects of this altered lifestyle on placental development. **METHODS:** We studied the birth records of 7083 babies born over a four-year period to Saudi nationals in Unizah, a small city 350km to the north of Riyadh, the capital city of Saudi Arabia. The records included birth weight, placental weight and gestational age. **RESULTS:** Mean birth weight was similar to European values but the mean placental weight and ratio of placental weight to birth weight were lower. Among babies who were in the second or third trimester of gestation during Ramadan the mean placental weight and ratio were below those of babies who were not in utero during Ramadan. Among boys the mean placental ratios were 14.4 percent (second trimester) and 14.5 percent (third trimester) compared with 14.9 percent (p=

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