Background
The important role of thyroid hormones on postnatal growth, neurological development and cognition has been documented both in animals and humans. As during intrauterine development, the fetal Hypothalamic-Pituitary-Thyroid Axis, is not functionally matured, and the placenta is impermeable to TSH and is largely impermeable to thyroid hormones. As during intrauterine development, the fetal Hypothalamic-Pituitary-Thyroid Axis, is not functionally matured, and the placenta is impermeable to TSH and is largely impermeable to thyroid hormones. Growth, neurological development and cognition has been documented both in animals and humans.

Results
This is the first report on the head circumference (i.e. brain size), birth length and weight in neonates of hypothyroid mothers.

Methods
Data were extracted from the medical records of the mothers and the neonates as registered in the computerized system of the Rabin Medical Centre. Data were analysed using the BMDP Statistical Software and ANOVA.

Conclusions
This is the first report on the head circumference (i.e. brain size), birth length and weight for both genders of neonates of mothers with hypothyroidism. Our findings may indicate that some mothers with hypothyroidism receive inadequate treatment.