

## Perinatal outcomes of vegetarian women: a case control study

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**Objective.** To evaluate the maternal and neonatal outcomes of vegetarian and vegan diets during pregnancy in order to guide healthcare professionals in the management of such women.

**Materials and Methods.** This is a retrospective observational (1:2) case-control study comparing the main pregnancy and perinatal outcomes of vegetarian/vegan and omnivorous (control) women.

**Results.** 309 women were identified during the study period. Of these, 103 women followed a vegetarian/vegan diet, and 206 women belonged to the control group. Vegetarian women resulted to have a greater intake of acetylsalicylic acid (veg = 15.53%; controls = 6.80%;  $p = 0.023$ ) and a higher prevalence of late preterm (veg = 12.62%; controls = 4.37%;  $p = 0.017$ ). No differences in intrapartum outcomes were found between the

two groups beside a greater prevalence of post-partum haemorrhage (veg = 13.92%; controls = 26.35%;  $p = 0.03$ ) in the control group. The multivariate logistic regression showed that the risk of preterm birth was increased in vegetarian women, smoking during pregnancy (OR 10.79,  $p=0.030$ ).

**Conclusions.** The greater rate of preterm birth found among vegetarians, reflects nutritional deficiencies not adequately treated during pregnancy. It is a fundamental responsibilities of health professionals to implement nutritional education to pregnant vegetarian women, associating an active lifestyle to prevent any adverse outcomes. An early identification and correction of dietary imbalances through the integration of critical nutrients may prevent adverse perinatal outcomes in such population.