

The Alberta Pregnancy Outcomes and Nutrition (APrON) cohort study: rationale and methods

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Abstract

The Alberta Pregnancy Outcomes and Nutrition (APrON) study is an ongoing prospective cohort study that recruits pregnant women early in pregnancy and, as of 2012, is following up their infants to 3 years of age. It has currently enrolled approximately 5000 Canadians (2000 pregnant women, their offspring and many of their partners). The primary aims of the APrON study were to determine the relationships between maternal nutrient intake and status, before, during and after gestation, and (1) maternal mood; (2) birth and

obstetric outcomes; and (3) infant neurodevelopment. We have collected comprehensive maternal nutrition, anthropometric, biological and mental health data at multiple points in the pregnancy and the post-partum period, as well as obstetrical, birth, health and neurodevelopmental outcomes of these pregnancies. The study continues to follow the infants through to 36 months of age. The current report describes the study design and methods, and findings of some pilot work. The APrON study is a significant resource with opportunities for collaboration.

Keywords: longitudinal cohort study, pregnancy, nutrition, mental health, birth outcomes, neurodevelopmental outcomes.