Improving health outcomes for mother and baby

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The Mother and Infant Nutrition Investigation wants to study new mothers who are at a late stage of pregnancy, or have recently given birth.

After the birth of their baby most women see their health care professionals, with the focus often on the baby's health. Yet 10 to 15 per

cent of new mothers in New Zealand will suffer from postnatal depression.

The mental health of the mother has been known to impact on their child's cognitive and emotional development.

A new study from Massey University – the Mother and Infant Nutrition Investigation (MINI) – will monitor the mother's health by assessing her nutrient status, thyroid function, general health, and potential link to postnatal depression.

Researchers in the MINI study are seeking healthy mothers who are at a late stage of pregnancy or have recently given birth. Participants must be based in the wider Manawatū region.

PhD researcher Ying Jin is studying three nutrients – iodine, selenium and iron – and the impact the combination of these nutrients has on thyroid function.

The thyroid, a small butterfly-shaped gland at the base of the neck, produces hormones. These three nutrients are key to how thyroid hormones function. Thyroid hormones, in turn, control our metabolism – the way we convert food and use it as energy.

"When the thyroid hormones are not adequately produced, or their production is impaired, many other bodily functions are affected, for example, possible increased frequency of anxiety, mood disturbances and depression," Ms Jin says.

The MINI study will screen for postnatal depression during each mother's visit and explore the relationship between multiple micronutrient deficiencies and the risk of postnatal depression.

Ms Jin says it is the first known study in New Zealand to investigate the intakes and status of all three micronutrients (iodine, selenium and iron), which are known to collectively affect thyroid function, rather than investigating a single micronutrient in isolation. "Understanding these nutrients will help to provide better health care to future mothers. This leads to greater knowledge about the health and wellbeing for both the mothers and their infants."

To express your interest in the MINI study, please register here.

Provided by Massey University