

Reducing the risk of being born too soon

What is the challenge?

Each year around 15 million babies worldwide are born preterm (<37 weeks gestation). Preterm birth complications are the leading cause of death for children under 5 years of age. These babies often require long periods in intensive care and may have short and long-term health and developmental problems. Despite many efforts made to reduce preterm birth, rates continue to rise. Therefore, it is crucial to find and implement successful strategies to prevent preterm birth. Very few interventions have been effective, but omega-3 supplementation during pregnancy is one of the most promising.

About this research translation project

This project has combined evidence from the large body of literature investigating omega-3 supplementation in pregnancy with the results from the largest omega-3 supplementation study in pregnancy, involving 5000 participants, which our team has just completed. We will use this knowledge to develop personalised clinical and community pathways for using omega-3 supplementation during pregnancy to prevent preterm birth, including developing an effective pathway for women at higher risk of preterm birth. We will also plan for the community-wide implementation of these pathways.

Consumer engagement is occurring through surveys and focus groups with a variety of women including those planning pregnancy, women at different stages of gestation, and women with young children. We will include diverse groups of women in this engagement including Aboriginal women who continue to experience poorer health outcomes when compared to other Australian women.

We are also involving clinicians and health care workers who provide medical and nutritional advice to pregnant women (obstetricians, gynaecologists, GPs, midwives, Aboriginal and Torres Strait Islander health workers, migrant and refugee health workers, pharmacists, dietitians and nutritionists). These key stakeholders, along with dietary supplement companies and policy makers, will be actively engaged in the development of the pathways and planning the implementation strategy.



Through our membership of the National Pregnancy Guidelines Implementation Group we are using this knowledge to help design broad strategies to translate these findings into action at a national level. We are developing online resources for practitioners and consumers. These resources will be complemented by individual advice using new, dried blood spot technology to measure omega-3 concentrations.

What was the impact?

Through the successful development and subsequent implementation of clinical and community pathways for omega-3 use, we aim to substantially prevent early birth, reduce the health and emotional burdens of preterm birth and save the Australian public healthcare system at least \$50 million per year.

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