

# Aotearoa Nutrition Guidelines for Preterm Babies Project

We have obtained a Health Research Project Grant to develop Aotearoa Nutrition Guidelines for Preterm Babies.

They will be developed by a multidisciplinary Guideline Development Group over the next two years. This is the third of the series of newsletters.

## Changes to the guideline development group

We have a new member on the Guideline Development Group – Lela Yap (Niue, Ngāti Pīkiao) who works at Dunedin Hospital as a Neonatologist and General Paediatrician. Associate Professor Liza Edmonds (Ngāpuhi; Ngāti Whātua) continues to be a member of both the Steering and Guideline Development Groups.



**Dr Lela Yap**

## Cochrane systematic review published on preterm infant feeding

We are excited to share that Guideline Development Group members Lilia Delgado Páramo, Luling Lin and Frank Bloomfield recently published a systematic review in the Cochrane Library. The review explored whether exposing preterm infants to the smell and taste of milk could accelerate their transition to full-sucking feeds.

The analysis included eight studies with 1,277 preterm infants in neonatal intensive care units. The main findings suggest that this intervention may have little to no impact on the time needed to reach full sucking feeds or on the duration of intravenous nutrition. Additionally, there were no significant effects on the time to achieve full enteral feeds or on the risk of developing serious conditions like necrotising enterocolitis and infections. The results are uncertain due to the limited high-quality evidence available.

Based on these findings, the review does not support the routine use of milk smell and taste exposure to improve neonatal health outcomes. Clinicians are advised to consider this intervention only within the context of further research.

These findings will contribute to the development of our guidelines, providing **high-quality evidence to inform practice recommendations.**

For more details, you can read the full review:  
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013038.pub3/full/hr>



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## New study finds waiting for mums' milk safer than we thought

Two Steering group members- first author Dr Tanith Alexander and lead author Professor Frank Bloomfield, led the DIAMOND trial, recently [published in the New England Journal of Medicine](#). It involved 530 babies born between 32- and 35+5-weeks' gestation who had intravenous access and whose mothers intended to breastfeed. The trial tested three interventions at the same time: whether intravenous protein in addition to the intravenous dextrose (sugar solution) all babies were receiving was beneficial; whether providing a milk substitute when there was insufficient mother's own milk compared with waiting for only mother's milk altered body composition, and whether providing taste and smell before each feed of milk given by a tube into the baby's stomach helped babies reach full milk feeds sooner.



**One of our participants**



**Professor Frank Bloomfield**



**Dr Tanith Alexander**

The trial found that giving extra intravenous protein and/or additional milk (usually infant formula) whilst waiting for mother's own milk did not alter body composition (e.g. percent fat mass) at four months of age. None of the interventions helped babies get to full breastfeeding any quicker than just waiting for mums' milk supply to become established. Being exposed to the taste and smell of milk prior to getting feeds via a tube into their stomach didn't make any difference to how long it took to get babies onto full normal feeds – and therefore be able to go home.

Study author Frank Bloomfield said these findings will be helpful in the writing of the Aotearoa Nutrition Guidelines for preterm babies, ensuring that wherever you are in the country babies are more likely to receive the same evidence-based care. He said "Doctors worldwide endorse breastfeeding, but there are no evidence-based guidelines around best-practice nutrition before a baby's mum is producing enough breast milk". "That's important because it tells us there's no need to give formula or an expensive intravenous protein solution to most moderately preterm babies whose mothers want to breastfeed – it doesn't change their fat mass he said. "Instead it's quite safe to wait for the mother to have enough breast milk, supporting them in the meantime with simple intravenous fluids.". This could potentially reduce the use of intravenous protein solutions which is not just a significant cost saving but means if there's a problem with the drip and if the solution gets into the skin, it causes less damage, Bloomfield says. The study is currently assessing the babies at two years, which will show whether development at two years is different depending on nutritional supplementation.

For further information visit: <https://www.nejm.org/doi/full/10.1056/NEJMoa2313942>  
<https://www.auckland.ac.nz/en/news/2024/04/26/prem-baby-study-finding-over-mums-milk.html>

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## Perinatal Society of Australia and New Zealand Conference 2024

This year's Perinatal Society of Australia and New Zealand conference was held in Christchurch from 7-10 April 2024, the theme being Whiria te Tangata – Weave our people together. A large number of the Aotearoa Nutrition Guidelines for Preterm Babies Steering and Guideline Development Group attended, as well as playing key roles in chairing, presenting, and developing posters. Several members of our research group presented at both at the pregress and as part of PSANZ.



### Chairing/ Presentations/ Plenarys

Co-Chairs, Infant Nutrition, Frank Bloomfield and Tanith Alexander

Breakfast session, Speaker, Necrotising Enterocolitis, Barbara Cormack

Co-Chair, Pharmacy/ Infection/Vaccination, Jutta van den Boom

Co-Chair, Growth & Nutrition, Barbara Cormack  
Presentation, Research: Past, Present and Future; The Research Landscape in Aotearoa, Frank Bloomfield

### Posters

Delgado Páramo, Lilia: Exposure to the Smell and Taste of Milk to Accelerate Feeding in Preterm Infants: A Cochrane Systematic Review

Lin, Luling: Te Tohu Waihonga - Aotearoa New Zealand Clinical Practice Guideline For Neonatal Hypoglycaemia

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