

# Omega-3 fats fail to slow lung disease in premature babies

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Credit: Anna Langova/public domain

The long-held belief that omega-3 fats can help reduce chronic lung disease in pre-term babies has been debunked by researchers.

An international study led by the South Australian Health and Medical Research Institute (SAHMRI) in Adelaide has found the risk of developing [chronic lung disease](#) is not reduced by adding omega-3

docosahexaenoic acid (DHA) to the diets of extremely [premature babies](#).

In fact, babies given additional DHA in the study showed an increase in lung disease.

The new research titled N3RO, involved more than 1200 babies born at least 11 weeks early across 13 major hospitals in Australia, New Zealand and Singapore.

Many pre-term babies have low DHA levels and need help with their breathing.

The lack of oxygen they absorb can result in inflammation of the lungs, which causes bronchopulmonary dysplasia (BPD), also known as chronic lung disease, and poor long-term health outcomes.

Lead researcher Dr Carmel Collins said previous suggestions that additional omega-3 fats had no harmful effects had resulted in increased amounts of DHA being included in products for premature babies.

"We set out thinking it would reduce chronic lung disease but it didn't –there was a small (five per cent) but statistically significant increase in the lung disease," she said.

"We have definitively proved that there is no benefit in giving extra DHA other than what is normally in breast milk and pre-term infant formula."

Previous studies suggested that chronic [lung](#) disease could be reduced if the amount of DHA in diets was increased to the levels babies received from the placenta when they are born full-term. This is more than three times the amount of DHA in breast milk or premature baby formula.

The babies were divided into two groups in the study: half received DHA supplements and half did not.

The results showed that about 44 per cent of the control group developed BPD and in the intervention group it was 49 percent.

According to the *Journal of Clinical Medicine*, there are a number of investigations demonstrating that almost 50 per cent of premature babies with BPD will require rehospitalisation within the first year of their lives.

The investigations also showed the incidence of sudden infant death syndrome was seven times greater in infants with BPD.

Dr Collins said nutritional management of premature babies in neonatal units should remain focused on delivering recommended healthy diets.

South Australia Director of Neonatal Services Andrew McPhee said the results of the N3RO study were significant.

"We have learned a lot and now have definitive information to help guide health professionals in their nutritional management of very premature infants," he said.

"The N3RO results reinforce that we need to be careful about the amounts of all nutrients, including DHA. More is not necessarily better."

The collaborative study was published in the *New England Journal of Medicine* this morning.

Provided by The Lead Australia

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