

Children in intensive care recover faster with little to no nutrition

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Critically ill children are artificially fed soon after their arrival in intensive care. This common practice is based on the assumption that it will help them recover more quickly. An international study coordinated

at KU Leuven, Belgium, has now disproven this theory. The study shows that receiving little to no nutrition during the first week in intensive care makes children recover faster.

Critically ill [children](#) in intensive care are unable to eat independently. The current standard of care for such children is based mostly on the assumption that they need to eat to regain their strength. Therefore, the method that is applied worldwide is to artificially feed these children during the first days of their stay in intensive care. This artificial nutrition is meant to strengthen their muscles, prevent complications, and speed up their recovery. The artificial nutrition is infused directly into the bloodstream.

An international team of researchers from University Hospitals Leuven (Belgium), Sophia Children's Hospital Rotterdam (The Netherlands), and Stollery Children's Hospital Edmonton (Canada) has now challenged the validity of this common practice. They conducted a [randomized controlled trial](#) that involved 1,440 critically ill children. The researchers examined whether fasting or receiving very small amounts of feeding during the first week in the paediatric [intensive care unit](#) was better for the children than full feeding through an IV.

The results are remarkable. "We found that the current practice of feeding children in an early stage does not contribute to their recovery", says lead author Professor Greet Van den Berghe from KU Leuven / University Hospitals Leuven. "On the contrary, the children who had built up a nutritional deficiency after receiving little to no feedings had fewer infections, less organ failure, and a quicker recovery than children who had been fed through the IV. The effect was present in everyone, regardless of the type of disease, the children's age, or the hospital in which they were staying." These findings provide strong evidence against current practice and can thus be expected to change paediatric intensive care worldwide.

Previous research by Professor Van den Berghe and her team (2011 and 2014) had already shown that early artificial feeding should be avoided to treat adults in [intensive care](#).

More information: Tom Fizez et al. Early versus Late Parenteral Nutrition in Critically Ill Children, *New England Journal of Medicine* (2016). [DOI: 10.1056/NEJMoa1514762](https://doi.org/10.1056/NEJMoa1514762)

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