

# Micronutrient powder effective in combating anaemia: study

July 18 2012

---



Dr. Susan Jack with some of the study children and their mothers in a Cambodian village.

(Medical Xpress) -- Mixing micronutrient powder into infants' complementary food reduces rates of anaemia beyond what nutrition education alone can achieve, according to University of Otago-led research involving more than 3000 Cambodian under two year olds.

Otago and Cambodian researchers conducted a randomised trial of the effectiveness of "Sprinkles" in reducing anaemia and iron deficiencies among 3112 six-month-old infants in rural Cambodia. Sprinkles are sachets containing a blend of iron and other micronutrients in powder form and are easily mixed into home-prepared foods.

The findings are newly published online in the journal *Archives of Pediatrics & Adolescent Medicine*.

Study lead author Dr. Susan Jack says that iron deficiency anaemia in infants is a global health problem affecting both developed and developing countries, but has its greatest impact in poorer parts of the world.

“Anaemia represents a major public health concern as it can cause cognitive and learning difficulties and is associated with increased mortality,” says Dr. Jack, who is a PhD student in the University of Otago’s Centre for International Health.

In Cambodia it is estimated that 55% of children younger than five are anaemic and 40% have stunted growth, she says.

Infants in the study were divided into a control and intervention group. Both groups’ caregivers received education about the importance of continued breastfeeding and good complementary feeding, but the intervention group’s caregivers were also given Sprinkles to use in daily feeding for six months.

Compared to the control group, after 12 months the prevalence of any anaemia in the Sprinkles group was reduced by 20% and moderate anaemia by 27%. After 12 and 18 months, iron deficiency prevalence—a risk factor for developing anaemia—was reduced by 24% and 12% respectively in the Sprinkles group.

“This study provides clear evidence supporting the roll-out of Sprinkles as a micronutrient intervention in Cambodia and similar settings. Our findings also help build the case for Sprinkles to be used until at least 18 months of age, and preferably to age two, so that this period of greatest vulnerability to anaemia and iron deficiency can be fully covered,” says

Dr. Jack.

The researchers plan to continue conducting surveys to monitor the effectiveness of Sprinkles in reducing [anaemia](#) as the intervention is rolled-out through more of the country's provinces.

**More information:** Effect of Micronutrient Sprinkles on Reducing Anemia: A Cluster-Randomized Effectiveness Trial. Susan J. Jack, et al. [doi:10.1001/archpediatrics.2012.1003](https://doi.org/10.1001/archpediatrics.2012.1003)

Provided by University of Otago

Citation: Micronutrient powder effective in combating anaemia: study (2012, July 18) retrieved 19 April 2024 from <https://medicalxpress.com/news/2012-07-micronutrient-powder-effective-combating-anaemia.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.
---