

Intestinal flora in very low-birth weight infants.

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Abstract Aim: To study the early faecal microbiota in very low-birth weight infants (VLBW, <1500 g), possible associations between faecal microbiota and faecal calprotectin (f-calprotectin) and to describe the faecal microbiota in cases with necrotizing enterocolitis (NEC) before diagnosis. **Methods:** Stool samples from the first weeks of life were analysed in 48 VLBW infants. Bacterial cultures were performed and f-calprotectin concentrations were measured. In three NEC cases, cultures were performed on stool samples obtained before diagnosis. **Results:** Bifidobacteria and lactobacilli were often identified in the first stool sample, 55% and 71% of cases, respectively within the first week of life. A positive correlation between lactic acid bacteria (LAB) and volume of enteral feed was found. Other bacteria often identified were *Escherichia coli*, *Enterococcus* and *Staphylococcus* sp. F-calprotectin was not associated with any bacterial species. All NEC cases had an early colonization of LAB. Prior to onset of disease, all cases had a high colonization of non-*E. coli* Gram-negative species. **Conclusion:** In contrast to the previous studies in VLBW infants, we found an early colonization with LAB. We speculate that this may be due to early feeding of non-pasteurized breast milk.

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J Pediatr Gastroenterol Nutr. 2007 Apr; 44(4):407-13.
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Adv Exp Med Biol. 2001; 501:519-27.
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- [Intestinal microflora in early infancy: composition and development.](#)

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