Early Studies Observed a *Bifidobacterium*-Dominant Gut Microbiome in Exclusively Breast-fed Infants

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THE INTESTINAL FLORA OF INFANTS AND YOUNG CHILDREN.¹

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There is, therefore, an important difference between the Gram-positive bacilli of bottle-fed cases and those of purely breast-fed cases, in that the former, even though present in small numbers and mixed with other organisms in considerable variety, can be isolated with ease; while the latter seen in the films in almost pure culture, can only be induced to grow on artificial media by the exercise of great patience.

My personal belief is that Tissier was correct in his statement that the bacillus seen in the films from breast-fed cases is the strictly anaerobic bacillus called by him the *B. bifidus*; and I believe that...

In 1899, **Henry Tissier, a French pediatrician** at the Pasteur Institute in Paris, isolated a bacterium characterized by a Y-Shaped morphology in the intestinal flora of breast-fed infants and named it “bifidus.”
Infants from developing countries have been found to have higher levels of fecal bifidobacteria than infants from more developed countries.\textsuperscript{1-5} This difference may be due to increased rates of C-section delivery, antibiotic use, and feeding practices other than exclusive breastfeeding. Lower levels of bifidobacteria in the infant gut have been linked to increased incidence of metabolic and inflammatory disorders.