Studies on Reducing Sugars in Stools of Acute Infantile Diarrhea, with Special Reference to the Difference between Breast-fed and Artificially Fed Babies

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One hundred and fifteen cases of acute infantile diarrhea, including 38 cases of breast feeding and 77 artificial feeding, were studied. 1) Reducing sugar was detected in 101 cases. 2) In the breas-fed babies' stools of frequent diarrhea as well as stools containing much sugar tended to show high pH. 3) On the contrary, in the artificially fed babies stools of frequent diarrhea as well as stools containing much sugar tended to show low pH. 4) The oral administration of β-galactosidase preparation brought a good clinical effect on the acute infantile diarrhea of the artificially fed babies, but not satisfactory on that of the breast-fed babies. 5) In diarrheal stools of breast-fed babies, the majority of reducing sugars was found to be composed of oligosaccharide, and the stool contained lactose in very few amount and lactase was found to be of high activity. 6) Diarrheal stools artificially fed babies, on the contrary, contained few oligosaccharide and much lactose and showed low lactase activity.

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