

Modulation of Intestinal Alkaline Phosphatase and Lactase Activities in Organ Culture by Growth Factors

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Colostrum and milk are rich sources of nutrients and biologically active substances. Among these substances growth factors are present that are crucial for the proper development of neonates. These growth factors include EGF, SCF, aFGF, bFGF, TNF-alpha and several others. The exact biological role of the latter factors is still under investigation. We have hypothesized that EGF, SCF, TNF-alpha, aFGF and bFGF could influence the activity and distribution of two important intestinal enzymes namely lactase and intestinal alkaline phosphatase. Using biochemistry protocols to measure the total enzyme activities we determined different types of dependence between the growth factors and the enzymes studied.

Key words: growth factors, intestinal alkaline phosphatase, lactase.