MILK AND PLASMA COPEPTIN, ADROPIN LEVELS WITHwithout GESTATIONAL DIABETES MELLITUS

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Human milk is full of peptides, albeit copeptin, adropin and irisin peptides have not been shown to be present in breast milk yet. The aim of this work was (1) to find out whether human milk contained copeptin, adropin and irisin peptides and their alteration with without gestational diabetes mellitus (GDM). Blood and milk samples were collected from lactating mothers with and without GDM before suckling. Blood and milk sample peptides concentrations were determined by immunoassay methods. It was found that human milk contained those peptides. Their levels were higher than those in transitional and mature milk samples from healthy women. The concentration of copeptin in the colostrums and transitional milk were higher than in mature milk samples from women with GDM, while the concentration of adropin and irisin were lower. Also, their levels in blood, in general, were lower than that of milk levels. Copeptin, adropin and irisin peptides in breast milk might help babies during growth and maturation.