

Lectin histochemistry of enterocytes sugar residues in the gut of the chick embryo and of the newborn

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SUMMARY

The glycoconjugates sugar residues content, distribution and changes in the enterocytes of different tracts of the developing intestine of the chick embryo and of 1-day-old chick were investigated, using a battery of seven HRP-conjugated lectins (DBA, SBA, PNA, WGA, ConA, LTA and UEAI). The results of the present research have shown the presence of a large amount of glycoconjugates sugar residues in the enterocytes of duodenal, ileal and colonic anlage, starting from the beginning of the second week of incubation. Differences were detected among the three investigated intestinal segments, as to the time of appearance of the glycoconjugates sugar residues in the enterocytes. The duodenal enterocytes showed the most precocious appearance of lectin-reactive material, followed by the ileal enterocytes and afterwards by colonic enterocytes. The duodenal enterocytes were characterised by the presence of SBA binding sites, which were not detectable in the duodenal enterocytes of the adult animal.