From conventional to modern histochemistry: a way for the fine characterization of secretion glycoconjugates

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SUMMARY

This work is aimed to demonstrate that a fine characterization and a real classification of secretions could be carried out employing all glycohistochemical techniques and considering the total picture of response to conventional and lectin histochemistry, combined with enzymatic, oxidative and saponification treatments. By several years, our group attend to the characterization of glycoconjugates produced by different alimentary canal tracts of tilapine polyhybrid *Tilapia nilotica x mossambica x zilii* that demonstrates himself as optimal experimental model for testing the efficacy of various histochemical techniques. Although formation and maintenance of seromucous layer could be considered a function common to different secretions, every epythelial tissue contains specific types of glycoconjugates specifically structured for tissue needs; these glycoconjugates can evolve or modify themselves following changes of physiological and environmental conditions as development, diet or possible damages.

Analysing obtained results we attempt to allot a specific defensive role to mucosae related to glycoconjugates that characterize each alimentary tract examined. Structural heterogeneity of glucidic chains could prevent the attach of viruses and bacteria masking specific sites and hampering the formation of multiple binds.