SUMMARY

The obtained results in this investigation represent the influence of prolactin on plasma level of different hormones with metabolic activity including GH, TSH, cortisol, glucagon and insulin in male, female mices and virgin as well the uptake of C^{14}-Galactose, C^{14}-Valine and C^{14}-Arginine in different tissues of mices.

Four logarismic doses of prolactin (10, 59, 144 and 350 µg/kg.B.W.) was performed and sampling (for hormonal assay) were 30 min 24 hrs, and 72 hr. following the i.p. application of prolactin, but sampling (for the C^{14}-Galactose, C^{14}-Valine and C^{14}-Arginine) was 24 hr. following the administeration of the different prolactin doses.

The results were, then, stastistically analysed and illustrated in 27 tables and 9 figures.

The gained results can be summarised in the following items:

of prolactin often have no effect or an effect which is diametrically opposit to the "Physiological" one seen at law concenterations. This phenomenon has been also described by Sas et al. (1977); the effect of prolactin on fractose metabolism in human sperm was found maximal at around 10 ng/ml and falls of below and above that. We assume hier that the ability of prolactin to mobilise other important hormones in the body, as described before in this study, plays an enormous role in the definition of the ultimate picture of the injection of different doses of prolactin. Furthermore, looking for the difference between immature animals and virgin confirm the above mentioned openion about the role of the physiological background of the model in the response to the prolactin.Thus, it can be concluded that the obtained results hier in the summation of the direct action of prolactin on the target organ in 24 hours (the time from injection untill sacrification) as well the other anabolic and catabolic hormones which could be mobilised by the prolactin injection as described before.