enzyme was determined by the disappearence of histamine in the incubation mixtures in the presence of S-adenosylmethionine according to Lorenz *et al.* [1]. Histamine was measured spectrofluorometrically after isolation by ion exchange chromatography on Dowex 50 WX-8 and the specificity of the method was proved as described in [1].
Histamine methyltransferase from pig antrum was purified 6-fold by ultracentrifugation and fractional precipitation by ammonium sulfate (45—70 % saturation). The enzyme showed the following properties: K_m for histamine $2{,}3 \cdot 10^{-5}$ M, K_m for S-adenosylmethionine $4{,}3 \cdot 10^{-5}$ M, pH-optimum 7,4. The occurrence of histamine methyltransferase in salivary glands and gastric mucosa supports the hypothesis that histamine is a physiological chemostimulator of parasympathetic salivary and gastric secretion [2,3].

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Histamine Release in Man by Propanidid (Epontol®), Gelatine (Haemaccel®), Histalog, Pentagastrin and Insulin

Histaminfreisetzung beim Menschen durch Epontol®, Haemaccel®, Histalog, Pentagastrin und Insulin

Lorenz, W., Doenicke, A., Feifel, G., Messmer, K., Meier, R., Bennesch, L., Barth, H., Kusche, J., Hutzel, M., Werle, E.

In the blood plasma and gastric juice of 9 healthy, male students, histamine concentrations of 0.8 ± 0.3 ng/ml and of 24.0 ± 9.1 ng/ml (basal secretion) were determined. Histamine was measured spectrofluorometrically after isolation by ion exchange chromatography on Dowex 50 WX-8 followed by extraction into alkaline butanol [2]. The specifity of the method was proved by thinlayer chromatography, degradation by diamine oxidase (pig kidney) and histamine methyltransferase (guinea-pig brain), and by bioassay (guinea-pig ileum and cat blood pressure) [2].
2, 5, 10 and 15 min after the injection of Epontol® the histamine concentration of the venous plasma increased significantly by 100, 230, 160

and 120% ($n = 10$). Hypotensive reactions and gastric acid secretion [1] completes the evidence that Epontol® is a histamine releaser in man.
Rapid infusion of 500 ml Haemaccel® (2 ml/min and kg) after the withdrawal of the same volume of blood (1 ml/min and kg) also caused a significant increase of the histamine concentration in the plasma. This increase was 90, 190 and 60% 1, 5 and 10 min after the end of the infusion ($n = 5$).
Histamine concentrations in the gastric juice and histamine outputs were determined under basal conditions and after stimulation by 2 mg/kg histalog, 6 µg/kg pentagastrin and 0,2 U/kg insulin. Compared with the histamine concentrations in the gastric juice during the one hour basal secretion they remained unchanged after the stimulation by insulin, but decreased after pentagastrin by 30%, and after histalog by 60% (measured in the peak hour). However, the histamine outputs into the gastric juice increased in all cases after insulin and pentagastrin (110% on the average). After histalog they increased in six of nine cases (80% on the average).

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Vergleichende Untersuchungen über den Einfluß von Glymidin-natrium, Glucagon und Isopropylnoradrenalin auf die Insulinsekretion bei Ratten

Influence of Sodium Glymidine, Glucagon and Isopropylnorepinephrine on Insulin Secretion in Rats

Losert, W., Rosenthal, K., Jahn, P., Sitt, R.

Durch Bestimmung der Insulin(I)konzentration im Serum des Pfortaderblutes von Ratten nach i.v. Injektion von Glykodiazin (Glymidinnatrium Gl), Glucagon (G) und Isopropylnoradrenalin (Is) sollte ein Beitrag zur Klärung der bisher uneinheitlich beantworteten [2,3] Frage geleistet werden, ob β-cytotrope Sulfonamide (S) die I-abgabe (A) durch Erhöhung des 3′-5′-AMP-(cA)-Gehaltes steigern. — Die Wirkung von Gl wird im Gegensatz zu den Effekten von G und (soweit untersucht) Is weder durch Theophyllin (T) verstärkt, noch durch Diazoxid (D) oder 3′-AMP abgeschwächt. 3′-AMP beeinflußt den cA-Effekt auf die ex-