

Effect of ethanol on pancreatic enzyme secretion

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Effects of ethanol on pancreas enzyme secretion are a subject of controversy. Stimulatory and inhibitory effects have been reported. In in vitro experiments, pigeon pancreas slices were incubated with ethanol and cholecystokinin pancreozymin. Spontaneous amylase secretion into the incubation media or stimulated cholecystokinin pancreozymin were unaffected by the addition of ethanol. In in vivo experiments, ethanol was given orally to pigeons, which were subsequently killed at 2, 4, 8, 12, 16 and 32 hr. In these experiments, ethanol induced amylase release, but the maximal secretory effect occurred when blood ethanol had returned to basal level. The delayed secretory effect of ethanol produced a state in which the pancreas contained a high enzyme concentration.