
Abstract
In preliminary observations on puppies with severe pantothenic acid deficiency, we noted that their adrenal cortices exhibited a depletion of lipids. Investigators in many laboratories have reported hemorrhage and necrosis in the adrenal cortices of rats on similarly deficient diets (Daft and Sebrell, 1939; Nelson, 1939; Ashburn, 1940; Miller, Shaw, Elvehjem and Phillips, 1940; Morgan and Simms, 1940; Salmon and Engel, 1940; and Supplee, Bender and Kahlenberg, 1942). Furthermore, in pantothenic acid deficient puppies Schaefer, McKibbin and Elvehjem (1942) found alterations in blood chloride, glucose, and non-protein nitrogen, in addition to gastritis and hemorrhagic kidneys and thymuses. All of these changes have been recorded by Selye (1937) and others as characteristic of an “alarm reaction” resulting from any of a variety of stress conditions. - See more at: http://press.endocrine.org/doi/abs/10.1210/endo-38-6-385#sthash.EyzSUTaf.dpuf