that the serum cholesterol in individuals with coronary artery disease reaches inordinately high levels in many (but not all) instances. The serum phospholipids, on the other hand, do not keep pace with this rise in serum cholesterol. Hence it is believed that one of the factors favoring the deposition of cholesterol in the intima is enhanced because of the lack of a colloid stabilizer which may be reflected by the proportion of phospholipids in the serum. Conversely, in the normal individual it may be suggested that the colloid stability of cholesterol is unchanged because the rise of serum phospholipids is proportional to the rise in serum cholesterol.

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# Inhibition of Anaphylaxis in Guinea Pigs by D-Catechin

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The use of antihistaminic agents has proved to be an effective adjunct in the treatment of various allergenic reactions by virtue of their antagonistic activity toward preformed histamine. Recently, Martin *et al.* (4) demonstrated *in vitro* the inhibitory effects of vitamin P compounds in histidine decarboxylase. This enzyme, present in animal tissues, is capable of forming histamine from histidine (3, 6, 7). Preliminary tests *in vivo* (1) also indicated that these compounds are active. Their activity might be directed toward inhibition of the formation of histamine. Inhibition of histamine formation in the body seems a rational approach to the treatment of allergies.

In this study, 14 guinea pigs were sensitized in the manner described by Raiman *et al.* (5). Half of the animals received 2 mg of D-catechin, an aglycone flavonoid, intraperitoneally daily for 19 days. The remaining animals were not treated and served as controls. At the end of the 19-day period each animal was shocked by an intracardial injection of 0.1-0.5 ml of fresh normal horse serum.

The animals receiving D-catechin exhibited no anaphylactic reactions. The control animals exhibited typical reactions followed by extreme dyspnea and finally death due to asphyxia. The complete reaction lasted approximately 5 min.

Four additional guinea pigs, which had received daily doses of D-catechin for 1 week, were injected intracardially with 0.1 mg of histamine diphosphate. These animals died several minutes later with typical shock symptoms.

The dead control animals and the animals from the histamine group were autopsied. No significant difference in gross pathology could be observed. The predominating characteristic in both groups of animals was the constriction of the bronchiolar muscles. Each animal showed varying degrees of pulmonary edema and hyperemia.

These studies show that D-catechin protects guinea pigs from anaphylactic reactions but not from histamine shock. It appears reasonable to believe that this protective activity might be attributed to an actual inhibition of histidine decarboxvlase. This reaction would tend to prevent the formation of histamine, which is an important factor in the anaphylactic syndrome  $(\mathcal{Z})$ .

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# Regeneration of the Shoot Apex of Lupinus albus after Operations upon the Central Initials

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In attempting to transplant the central portion of the shoot apex, it was noted that the uninjured portions of the original meristem regenerated into one or two normal apices. This regeneration was similar to that described by Linsbauer (2) and Pilkington (3) after different operations. The heavy black line in Fig. 1 shows the position of the cuts made in the shoot apex. The sector (S) was either transplanted to another apex, replaced in the same or reversed orientation in the original apex, or excised. Usually the sector died when it was left in an apex (Figs. 2, 3, 4, 5), and its shrunken remains marked the site of the operation. When the sectors were re-

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