

Serum ascorbic acid, vitamin A, carotene, vitamin E, riboflavin and alkaline phosphatase values in Central American school children.
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Blood sera from Central American school children in the 7-12 age range were studied preparatory to the introduction of supplementary feeding programs. In Guatemala 275 school children had average values as follows: ascorbic acid, 1.24 mg.%; vitamin A, 27.2 γ %; carotene, 121 γ %; vitamin E, 0.61 mg.%; riboflavin, 1.78 γ %; alkaline phosphatase, 5.14 mm/l/hr. with para-nitrophenyl phosphate substrate. In El Salvador the average values on 200 school children were: ascorbic acid, 1.77 mg.%; vitamin A, 21.7 γ %; carotene, 68 γ %; vitamin E, 0.69 mg.%; riboflavin, 1.57 γ %; alkaline phosphatase, 4.94 mm/l/hr. In Honduras 90 school children averaged: ascorbic acid, 2.64 mg.%; vitamin A, 28.6 γ %; carotene, 57 γ %; vitamin E, 0.67 mg.%; riboflavin, 1.73 γ %; alkaline phosphatase, 5.43 mm/l/hr. In Costa Rica the values on 140 school children averaged: ascorbic acid, 1.47 mg.%, vitamin A, 28.8 γ %; carotene, 77 γ %; vitamin E, 0.74 mg.%; riboflavin, 1.46 γ %; alkaline phosphatase, 4.66 mm/l/hr. The vitamin A and carotene results appeared related to clinical and dietary findings. The high ascorbic acid levels as well as rural and urban differences are discussed. No cases with elevated (greater than 8 mm/l/hr.) alkaline phosphatase were observed. Vitamin E and riboflavin values do not differ from those for school children in the United States. These values are apparently not influenced by 20- γ tablets of vitamin B₁₂ or 50-mg. capsules of aureomycin administered 6 days/week over periods up to 15 months.