

## Illinois Section.

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### Calcium Partition in Blood Serum in Vascular Hypertension and in Experimental Hypervitaminosis D.

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Partition of serum calcium in 16 cases of vascular hypertension without treatment showed the average value for diffusible calcium to be 57% of the total serum calcium. Determinations carried out on 5 apparently normal individuals of similar ages gave an average value of 65% for diffusible calcium. The average total serum calcium for both groups was almost identical, being 10.3 mg./100 cc. for normals, and 10.5 mg./100 cc. for hypertension cases.

In hypervitaminosis D, produced in adult rabbits by feeding large doses (26,000 to 61,000 rat units per day) of irradiated ergosterol dissolved in sesame oil,<sup>1</sup> the percentage of diffusible calcium decreased from an average normal value of 58% to 49% of the total serum calcium. The average total serum calcium in these animals increased from 14 mg. to 17 mg. per 100 cc. of serum. Inorganic phosphorus values in this condition increase to approximately twice the normal value. Serum proteins remained unchanged in hypervitaminosis D, the average normal value being 6%.

Daily doses equal to or greater than 26,000 rat units of irradiated ergosterol were found to be definitely toxic for adult rabbits weighing from 2 to 3 kg., if administered for 15 days or longer.

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<sup>1</sup> Supplied through the courtesy of the Abbott Laboratories.