in the analysis of the site of action of ephedrine, and possibly also of the sensitizing action of cocaine.

It is to be noted that the above potentiations were upon organs contracted by epinephrine or ephedrine. Reports by Lindblom[3] and Halsey[4] indicated a similar cocaine sensitization of the small bowel to the inhibitory action of epinephrine. We, however, have made 15 trials in 8 animals, without being able to demonstrate any definite sensitization of the small bowel of the rabbit or the small or large bowel of the guinea pig toward either epinephrine or ephedrine. The more frequent finding was an antagonism of the inhibitory action of epinephrine or ephedrine by cocaine.

No change in pH resulted from adding the cocaine solution to the organ bath, hence pH changes could not account for the sensitization.

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Relation of Bone Development in Infants to Calcium and Phosphorus Retention Ratios.

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Calcium and phosphorus retentions in infants receiving 3 different types of cow's milk modifications have been determined. In 2 cases the infants, who were quite normal, received the particular modifications, namely boiled cow's milk, and dried milk† for several consecutive months during the first year, thus making possible a number of metabolism studies on the same infant. With the 3rd mixture, namely S. M. A.,‡ the food was given from one to 2 weeks before the metabolic period, 2 studies being made with one infant; and one with a 2nd infant. The calcium and phosphorus retentions in one rachitic child have been included for comparison. Cod liver oil and orange juice were given daily in all but one case. In this,

[3] Lindblom, *Compt. Rend. Soc. Biol.*, 1926, xcv, 1072.

[4] Halsey, personal communication.

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† Klim: A whole dried milk preparation manufactured by Merrill Soule and Company, Syracuse, New York.

‡ S. M. A.: A cow's milk preparation in which the fat has been so modified as to more nearly resemble that of human milk. Cod liver oil is included in its preparation.

TABLE I—*Calcium and Phosphorus Retention in Infants.*

Name	Age	Weight	Creatinin	Calcium.				Phosphorus.				Retention Ratio	Cod Liver Oil
				Ingestion	Excretion.		Retention per kg.	Ingestion	Excretion.		Retention per kg.		
					Urine	Feces			Urine	Feces			
	mo. da.	kg.	mg.	gm.	gm.	gm.	gm.	gm.	gm.	gm.	gm.	Ca:P	
A. Boiled Milk with Cod Liver Oil.													
E. M.	2—13	5.65	66	.793	.031	.383	.066	.628	.361	.065	.036	1.8	5
,,	2—24	6.07	69	.793	.029	.508	.042	.628	.354	.104	.028	1.5	5
,,	3— 9	6.57	72	.793	.039	535	.034	.628	.343	.132	.023	1.4	5
,,	3—24	6.97	83	.866	.043	.673	.021	.676	376	.179	.013	1.7	5
,,	4— 6	7.25	85	.866	.037	.626	.028	.676	376	.164	.019	1.5	5
,,	4—13	7.47	91	.938	.048	.685	.027	.738	.449	.180	.015	1.8	5
B. Dried Milk with Cod Liver Oil.													
P. H.	5	8.50	108	1.092	.038	.781	.032	.917	.526	.240	.018	1.8	5
,,	5—15	8.88	112	1.092	.036	.759	.033	.917	.491	.279	.017	2.0	5
,,	5—26	9.30	116	1.092	.035	.754	.033	.917	.476	.296	.016	2.0	5
,,	6—26	9.68	110	1.092*	.029	.821	.025	.917	.508	.291	.012	2.0	5
,,	7— 3	9.87	120	1.092	.056	.844	.019	.917	.508	.282	.013	1.5	5

*Milk irradiated with mercury quartz lamp one hour at distance of two feet.