

the growth of the seedlings. Ecgonin hydrochloride inhibited growth in concentrations of .0055 per cent., while benzoyl ecgonin was much less toxic, requiring $2\frac{1}{2}$ per cent. concentration to affect the growth. Methyl alcohol was found to be very little toxic to the roots of the lupinus, requiring 4.8 per cent. to produce an inhibition of growth. Contrary to expectation the most toxic decomposition product of cocaine was found to be sodium benzoate, a compound which is practically non-toxic for animal tissues. Sodium benzoate was found to be deleterious to the lupinus root in concentrations of 0.007 per cent.; while the ester methyl-benzoate was found to produce inhibition in concentrations of 0.014 per cent. Various simple mixtures of ecgonin, sodium benzoate, methyl alcohol, benzoyl ecgonin, etc., were also studied and the effects of these will be described in the complete paper in the Journal of General Physiology.

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Spontaneous cure of rickets in rats.

By **ALFRED F. HESS, LESTER J. UNGER** and **A. M. PAPPENHEIMER.**

[From the Department of Pathology, College of Physicians and Surgeons, New York City.]

It has long been believed that in infants healing of rickets occurs in spite of the diet and environment remaining unchanged. Some time ago in the course of an experiment on the curative effect of sunlight in the rickets of rats, it was observed that rickets healed in two of the control animals. One of these rats was on the Sherman and Pappenheimer diet plus 25 mg. P. per cent. and the other on the same diet with an addition of 50 mg. P. per cent. The rats weighed 34 g. at the outset, and after 30 days showed rickets by x-ray. After 62 days the radiograph was negative in one instance and demonstrated healing in the other. Autopsies of both revealed no gross rachitic changes; microscopic examination showed healed rickets at the costo-chondral junctions in one instance, in the other no rickets was found but some autolysis had taken place.

Rat	Diet	t ₅₀ M	X-Ray 18 ds.	t ₅₀ M	X-Ray 32 ds.	t ₅₀ M	X-Ray 48 ds.	t ₅₀ M	X-Ray 74 ds.	t ₅₀ M	Pathology.		Inorg. P. mg. %.
											Gross.	Micros.	
631...	84 + 25 mg. P. per cent.	36	Slight R.	54	Mod. R.	62	Healed R.	58	Healed	50	No. R.	Osteoporosis following previous R.	3.46
633...	do.	40	R.	54	Mod. R.	60	Healing R.	60	Healed	50	No R.	Inactive Osteogenesis No R.	3.0
635...	do.	38	Slight R.	50	Slight R.	54	Healing R.	64	Healed	60	No R.	Healing R.	3.75
639A.	do.	40	Almost neg.	64	Mod. R.	70	Healing R.	68	Healed	54	No R.	Osteoporosis	
445...	do.	34			Rickets		Marked R.		Healing R.	50	No R.	No R. (Autolysis)	