

1. The mammalian red blood corpuscle is a nuclear bud which escapes into the circulation as the true red cell.

2. The mammalian normoblast and the red corpuscle of the bird are the product of intranuclear activity and are phylogenetically identical.

3. Phagocytosis of red cells by the giant cells (megakaryocytes) in normal blood-forming tissues is by no means common. The true process is undoubtedly the manufacture of red cells and not the destruction of them.

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The use of pancreatic vitamine in cases of infant malnutrition.

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Preliminary experiments by the senior author had demonstrated that pancreatic vitamine is removed very completely by treating the containing extract with Lloyd's reagent (50 g. Lloyd to 1 liter of extract). When the activated Lloyd powder is dried it retains its power as a vitamine carrier and in case of rats exercises the same power as water solutions of vitamine.

Basing work upon the above fact, attempts were made to restore to growth marasmic children, by mixing activated Lloyd powder with their cereal. In these studies Dr. Roper assisted in selecting the children from the wards of the New York Hospital and in directing their treatment.

Experiments were begun in October and the treatment has now been applied to ten babies, including one furnished by the Babies Hospital through the kindness of Dr. Bartlett.

In all the cases the addition of the powder has been followed by increased growth of a normal tissue-forming type. In the case at the Babies Hospital this growth was the first normal increase since July 25.

In one case at the New York Hospital the child was being fed on cereal and condensed milk. This case was selected for special control study. For this purpose five rats were selected

and fed with the same cereal and condensed milk as the child. The effect of adding or omitting vitamine to the diet of the rats and child are shown in the following table.

DIETARY FIGURES ON CASE FED UPON A CEREAL AND CONDENSED MILK DIET.

	Vitamine Given with Cereal at Beginning Diet.		No Vitamine Given with Cereal at Beginning Diet.			Child John G.
	Rat No. 20.	Rat No. 22.	Rat No. 16.	Rat No. 17.	Rat No. 18.	
Weight at beginning of diet	69	50	78	66	76	3.444
Weight at end of diet	88	73	62	67	76	
			Dead	Dead	Alive	3.920
No. days of diet	13	13	23	22	24	21
Net change in weight	19	23	16	1	0	*476
Total cereal consumed	446	452	768	660	792	
Ave. daily consumption	34	35	32	30	33	
Ave. daily consumption milk	56	56	56	56	56	
<i>Second Period</i>						
Weight of rat when vitamine was stopped	88	73	—	—	—	3.920
Weight of rat when vitamine was resumed	88	89	—	—	—	4.088
No. days elapsed	12	12	—	—	—	9
Net change	0	16	—	—	—	168
<i>Third Period</i>						
Weight when vitamine was resumed	88	89	—	—	76	4.088
Weight at end of period	118	113	—	—	111	4.368
No. days elapsed	11	11	—	—	11	15
Net change	30	24	—	—	35	280

33 (1211)

Influence of pituitrin and of adrenalin on the pupil of normal and ganglionectomized rabbits. A demonstration.

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The impression prevails that adrenalin and pituitrin affect the body in the same direction. The most striking action is the production of a blood pressure rise by both substances. The action of both substances upon the uterus and upon the intestines

* This gain was made on addition of 2 grains of vitamine per day.