Pig superior:		Culture superior:	
Pig positive, culture negative	28	Culture positive, pig negative	7
Pig positive, culture incomplete	4	Culture positive, pig incomplete	5
Pig negative, culture incomplete	23	Culture negative, pig incomplete	43
	55		55

The material for seeding on the medium was at first treated with 6% sulphuric acid and later with 5% oxalic acid when Corper reported more favorable results with the latter method. The treatment in either instance was for 30 minutes at 37°C. Cultures were incubated for 12 weeks, and guinea pigs were killed in 6 weeks if they had not already died. Failure to complete the guinea pig tests was due almost entirely to death by secondary infection before tuberculous lesions had opportunity to develop. Failure to complete the culture tests was divided between loss by breakage in the centrifugalization, overgrowth by fungi or spore forming organisms, each 8 times, and 7 instances in which the material was treated for a longer period of time than that recommended and hence the negative results were discarded.

It is concluded that, from the standpoint of a diagnosis of tuberculosis, the guinea pig method surpasses the culture as a routine procedure.

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The Rôle of Proteins in Growth, Reproduction and Lactation. II. The Influence of Whole Liver on Growth and Lactation.*

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It was reported[1] that second generation albino rats on 2 diets, A and B, containing 15 and 20% liver protein respectively, were unable to nurse their young. The failure of lactation was not caused by a deficiency of vitamins since the administration of increased amounts of yeast and cod liver oil as well as the daily administration of 0.3 cc. of wheat germ oil led to no improvement. The daily administration of 0.5 to 1.0 gm. of dried whole liver (dried in a vacuum at 100°C.) also had no beneficial effect on lactation, where-

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[1] Smith, H. G., PROC. SOC. EXP. BIOL. AND MED., 1931, **28**, 597.

as 1.5 gm. of raw liver daily enabled the animals (9) to nurse their young successfully, 26 animals (45% of the 57 born) being weaned at 21 days of age. The success of raw liver in imparting the ability to lactate is further demonstrated in that third generation animals (2 males and 4 females on each diet) were considerably heavier than the parent generation had been at the same age, the males remained fertile longer than the second generation males, the females had normal oestrus cycles and they were able to nurse their young successfully without additional supplement to the diet.

Fifteen first generation animals reared on the diets supplemented by 0.5 gm. of dried whole liver in addition to yeast and cod liver oil grew at a faster rate than 32 control animals. Lactation was also improved by the dried liver supplement in that the percentage of the young which were weaned was approximately twice that of control animals (45% as against 26%) and the young were considerably heavier when weaned. The influence of the whole liver does not reside in the added protein or fat since growth and lactation were not appreciably influenced by supplementing the diets of a like number of animals with fat-free liver or liver fat equivalent in amount to the dried whole liver supplement.

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Attempts to Immunize Rabbits Against a Larval Cestode, Cysticercus Pisiformis.*

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Cysticercus pisiformis is the larval form of *Taenia pisiformis (serrata)*, a tapeworm found in the intestine of the dog. The larvae begin development in the liver of the rabbit and later migrate to the mesenteries, where they form typical cysticerci. Rabbits were injected with *Taenia pisiformis* material and subsequently fed with onchospheres of this species. Two cc. of a 1% suspension of fresh or powdered worm material in physiological saline solution were injected intraperitoneally, subcutaneously, or intravenously at intervals of 2 or 3 days for a total of 6 injections. From 3 to 19 weeks after the last injection the control and injected rabbits were fed equal amounts of a uniform suspension of mature onchospheres by

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