The cortical extract used seemed definitely to produce an effect upon the chronic form of adrenal insufficiency in rats. The mortality occurring about 3 or 4 days after operation, due chiefly to respiratory infection, did not appear to be much affected. However, the mortality of the second week, augmented in this case by accidental chilling was largely prevented by the extract. Its beneficial effect was also shown by the resumption of practically a normal growth curve in the second week, while the saline injected control animals gained less than half as much in this period. The weight of the thymus per gm. of body weight in the extract injected group was intermediate between that of the saline injected group and that of the controls. The extract seemed also to decrease slightly the susceptibility of the adrenalectomized rats to killed typhoid bacilli.

We are of the opinion that a more complete protection in this chronic form of adrenal insufficiency can be demonstrated by pushing the administration of extract just before and during the bacterial intoxication. Such an attempt is now in progress.

We want to thank Drs. Swingle and Pfiffner for furnishing us with the extract of the adrenal cortex used.

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Relation of Various Substances Used in the Artificial Feeding Mixtures of Infants to Nutritional Anemia.

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The investigation made for the purpose of determining the influence on the hemapoietic system of various substances commonly used in infant feeding included a study of both rats and infants.

In the work with rats, substances recommended for infant feeding: carbohydrate milk modifiers, orange juice, tomato juice, autolyzed yeast, liver, egg yolk, Vitamin B containing extracts, and various iron and copper additions, were tested. These were fed in conjunction with milk in proportions comparable to those used in infant feeding. Unmodified milk diets including both boiled and pasteurized were included, also, for comparison. Fifty-seven animals were fed, 2 to 3 on each diet, for 6 to 18 weeks. Hemoglobin determinations (Newcomer method) were made at the beginning of experimental diet and after 7 weeks of the diet. Records of

food ingestion and body weights were kept to see what relation these have to hemoglobin formation.

The results of the investigation indicated that carbohydrate milk modifiers used in infant feeding differ in their ability to bring about hemoglobin formation. In rats lactose and sucrose seemingly have no influence since hemoglobin values for those receiving milk diets with these additions were no higher than for those receiving milk alone; Dextri-Maltose, corn syrup, Vitavose, or Mellin's Food, when used at a 7% level in conjunction with milk resulted in hemoglobin values which were only slightly below the optimum. Orange juice and tomato juice, when fed at the level recommended for infants, had no effect on hemoglobin production, and the autolyzed yeast addition resulted in only slightly higher values.

The addition of iron and copper in the amounts shown to be effective in increasing the hemoglobin formation in rats was without significant influence in infants. Egg yolk in the amounts fed produced no beneficial effects on the hemoglobin in the infants studied; liver increased the hemoglobin values only slightly. These results would seem to be due to the fact that the values observed, 11 gm. to 13 gm. per 100 cc. of blood before the additions of egg yolk and liver are very nearly optimum for the age group under observation.

The highest hemoglobin values observed in the infants studied were those receiving wheat embryo extract. This was contrary to the findings with rats, for in these the wheat embryo extract appeared to have no effect in increasing the hemoglobin values. A possible explanation for the results with infants is the better absorption of certain hemapoietic stimulating substances. This however was not tested.

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Treatment of Experimental Trichinosis in Rabbits with Neutroflavine.

CANDIDO AFRICA* AND JOHN T. LUCKER.† (Introduced by E. C. Faust.)

From the Zoological Division of the U. S. Bureau of Animal Industry.

In connection with tests of certain drugs in treatment of experimental trichinosis in rabbits, two series of experiments were carried

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