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Vitamin A and Longevity

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about 14 pounds of protein into the hundred pounds of gain. In one of our experiments with young orphan pigs, 20 percent of the protein fed was stored in the body.

Lactating sows may gain or lose weight during the suckling period. When the nutritive ratio was 1:4 or narrower and the litters were large, particularly when milk products were fed, the losses in weight on the part of suckling sows have been greatly reduced and the weights of the pigs at weaning time have shown increases. It is interesting to note what percentage of the sow gain or loss is protein and carbohydrate equivalent.

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VITAMIN A AND LONGEVITY

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(ABSTRACT)

Experiments have been conducted to determine if protein, minerals and vitamin A are of equal importance for prolongation of life. One group of rats was fed on white corn alone. White corn is known to be deficient in protein, vitamin A and minerals. Rats on the above diet lived an average of 72 days. A second group of rats received a diet consisting of white corn 88 per cent together with casein 12 per cent. They lived an average of 75 days. A third group of rats received white corn 98 per cent, and 5 per cent of salt mixture. They lived an average of 87 days. The fourth group of rats received white corn 95 per cent and 5 per cent of butterfat. All are alive at the end of 160 days. None of the animals grew. Distilled water was furnished ad. lib. to all of the animals.

THE PROTEIN REQUIREMENTS OF PRACTICALLY MATURE FATTENING CATTLE

C. C. CULBERTSON AND JOHN M. EVVARD

(ABSTRACT)

A number of tests have been carried on at the Iowa Agricultural Experiment Station with fattening two-year-old steers. These steers have been fed during the fall and winter months in dry lot, usually for 120 days.

Many different rations have been used with the basal check