One of the 5th pair of twins was completely thyroidectomized when 23 weeks old. Subcutaneous treatment with thyroxin was begun 13 weeks later and continued for 15 weeks. 28 weeks later the electrocardiograms were taken. They showed a distinct advance toward the normal from the cretin type.

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Preliminary studies of "posterior paralysis" in swine.

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A study is in progress of the frequently occurring trouble in swine, commonly referred to as "leg weakness" or "posterior paralysis." Some preliminary observations are here described.

In connection with another experiment, a group of 4 pigs, each about 12 weeks of age, were fed in dry lot for 90 days on a ration consisting of 1 part of yellow hominy feed and 1.4 parts of pasteurized skim milk, together with a mineral mixture made up of charcoal, ground limestone and common salt.

At or near the end of the 90-day period, 3 of the 4 pigs developed symptoms of trouble. A stiffness of the hind legs first became evident. The skin became dry, scaly and covered with large, livid spots. The stiffness increased, accompanied by pain. A swelling of the knee joints was noted in one individual. Finally, paralysis developed in the hind legs of 2 of the animals, they being able neither to rise nor to stand. A rapid loss in weight set in at this stage.

At the close of the 90-day period, the writer changed the diet for 2 of the pigs. One of them, number 122, was unable to rise or stand, was obviously in pain and was losing rapidly in weight; the other, No. 107, was markedly stiff behind but was still able to walk. To the hominy-skim milk ration, was added 4 ozs. of carrots per animal daily. The mineral mixture was replaced by precipitated bone meal, precipitated calcium carbonate and salt.

After 10 days, a decrease in the stiffness and in the skin troubles was noted in pig 107, and rapid growth was resumed. At the end of 5 weeks the stiffness had disappeared and the skin was nearly normal. During the last three weeks the pig gained over 2 lbs. a day, compared to 1 lb. at the close of the 90-day period. Pig 122 showed the first definite evidence of recovery after 3 weeks, when it was able to stand momentarily if placed on its feet. It could get up by itself and take several steps at 4 weeks. At 7 weeks, lost weight had been recovered, the skin was nearly normal, the pain appeared to be entirely gone, and the animal was able to get around rather freely, though stiffness was still present.

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The pathological tissue changes resulting from feeding cottonseed meal.

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Twelve pigs were fed a ration of cornmeal 60 per cent., wheat middlings 10 per cent., molasses 5 per cent. and cottonseed meal 10 per cent. which was gradually increased to 25 per cent. They also received a mineral mixture of salt and lime. Six of these died from 8 to 13 weeks after the experiment was begun, the rest were at that time changed to a ration free from cottonseed meal and are still alive.

The most constant tissue changes were ascites, hydrothorax, hydropericardium, a distension of the sheath, anasarca, œdema of the perirenal fat and congestion of the thyroid glands with a marked diminution of colloid material. In those that died first, there were marked subpleural and interlobular pulmonary œdema. The œdematous liquid was slightly reddened and gelatinized on standing.

A Holstein cow has been fed cottonseed meal for 10 weeks beginning with 6 quarts and gradually increased to 10 quarts daily comprising the entire grain ration, with hay for roughage.