PREVENT THE EFFECTS OF IRON DEFICIENCY IN SUCKLING PIGS

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That the sow's milk is deficient in iron has long been an established fact. From the time the pig is born until it begins to eat feed other than its mother's milk it is at the mercy of an iron deficient diet unless certain precautions are taken. Loss to the hog producer, resulting from development of nutritional anemia, (as a result of iron deficiency), appears to be particularly important in our northern climate. Originally it was believed to appear only where a practice was made of confining sows and pigs to concrete or plank floored pens during the suckling period. There is some evidence that the freezing of our surface soil in winter creates a similar condition.

Attempts to increase the iron content of the sow's milk have not been successful and have led to the recommendation that the pigs be dosed regularly with iron solution throughout the first weeks of the suckling period. Such treatment readily prevents the development of nutritional anemia to a critical level.

Recent experimentation at the North Dakota Experiment Station has indicated that preventing the development of anemia after the pigs are born is only a partial answer to the problem of iron deficiency. Pigs that have low amounts of stored iron in their systems at birth have been found to be lighter in weight at that time, and to make subsequently smaller gains during the early part of the suckling period. Such pigs are also less likely to live, being more susceptible to various ailments.

Addition of iron to the ration of sows and gilts throughout pregnancy has succeeded in increasing the amount of iron stored in the sows' bodies and in the bodies of the pigs at birth. These pigs that are born with greater stores of iron tend to be heavier and more vigorous at birth, and to make better gains early in life. Greater stores of iron in the pig's body will defer the onset of nutritional anemia.

Electric pig brooders have been found to be specially valuable when pigs approach an anemic condition, since such weakened pigs have been found to live longer when the protection of electric brooders is provided.

So prevalent is the occurrence of anemia in small pigs, and so cheaply and easily can sufficient precautionary measures be practiced that the following recommendations are made for the management of sows and their pigs:

1) Feed the sows and gilts one-half ounce of copperas per day throughout pregnancy and the suckling period. If sows are receiving mixed feed consisting of grains and protein supplements, add one-half pound of copperas to each 100 pounds of mixed feed.

If fed grain separate from the protein supplement, add two and one-half pounds of copperas to each 100 pounds of protein supplement. This amounts to about one *level* tablespoon each day per sow.

2) Drench suckling pigs two or three times each week with iron solution. This solution is made from copperas as follows: Secure copperas (also called ferrous sulphate) at any drug store. Add one-half pound of copperas to one quart of boiling water, and in addition add two pounds of sugar if the solution is to be used as a drench. This preparation may be kept in a quart bottle, and should be shaken well before using.

One-third of a teaspoon of the solution should be the maximum dose for pigs under one week of age. This dosage may be increased until the pigs are receiving one teaspoonful when they are about three or four weeks of age. A small section of glass tubing, used as a medicine dropper, is an excellent instrument for administering the dose. A mark may be placed on the glass tubing to indicate the size of the dose needed.

3) Begin creep feeding pigs at the earliest possible date. As soon as pigs are all eating grain, iron may be added to the feed and drenching stopped.

4) Use electric pig brooders for the first two weeks of the pig's life.

Although the most important time for use of such precautionary measures is during the winter, it has been found advisable to carry on such a program throughout the year.