

much to do with the quality of bacon. An inferior type of hog can be improved and a really good hog can be spoiled by following certain methods of feeding, and therefore breeding and feeding must go together in the production of firstclass bacon.

One of the most serious problems with which our packers have to deal is the quantity of "soft bacon" which comes to hand. In a soft side the fat lacks firmness of texture, being soft and flabby. The fatness of the animal seems to have little or no influence upon the softness or firmness of the fat, and among the hogs we have marketed there has been more softness among the carcasses which were too lean than among the over-fat ones.

Investigations regarding this matter are not by any means complete, but the work done up to the present would indicate that softness is not due to any one cause, but may be traced to a variety of causes. A very brief summary of the results of investigations to date may be of interest.

1. Danish investigators found that corn tended to produce inferior quality of bacon by injuring the texture of the fat. This was especially noticeable when the corn feeding was commenced at an early age and continued to the finish.

The feeding of dairy by-products with the meal ration apparently has a tendency to correct the evil. Foods which tend to produce an excessive development of fat, especially in young animals, are apt to cause softness, and this is, no doubt, the reason that corn has proved injurious, since it is essentially a fattening food. After a hog reaches 100 lbs. live weight, provided that he has good muscular development, there seems to be much less danger from corn feeding. It would appear, therefore, that it is during the earlier stages of growth that especial care is necessary.

As stated before, investigations are anything but complete, but the few notes furnished herewith may start some-one thinking.

Raising Calves for the Dairy

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The very best ration for the growing calf is provided by Dame Nature, and to secure the best results her methods must be imitated as closely as possible where the calf is to be raised by hand. For the dairy the treatment must be entirely different from that practised if beef or veal is



The Milkmaid's Household.

2. In our experiments at Guelph, finishing well grown hogs on corn did not appear to cause any injury. These hogs, however, weighed about 100 lbs. live weight before the corn feeding commenced. More extended trials, commencing with young pigs, are under way but not yet complete.

3. Exclusive grain feeding (without corn) of pigs confined in pens resulted in marked softness in many cases.

4. The feeding of dairy by products with the grain ration (no corn) to pigs confined in pens, gave a fine quality of bacon.

5. Hogs that had had abundant exercise until they reached 100 lbs. live weight, produced a good quality of bacon when finished on various rations, including corn.

6. Unthrifty hogs produced particularly soft bacon.

Now, let it be distinctly understood that it is not claimed in this article, nor is it even insinuated nor implied that corn will not cause softness in bacon. On the contrary, there is strong evidence that corn has a tendency to produce softness. But it must also be remembered that corn feeding is not responsible for all the soft bacon, and that soft bacon may result when neither corn nor clover has been fed. Lack of exercise accompanied by exclusive grain feeding is doubtless a common cause of softness.

wanted. To raise the best calf for the dairy it is possible to improve on whole milk as a ration and skim-milk as a basal food to grow a better heifer at less cost. Under domestication the quantity of milk yielded by the cow has increased until, from an animal giving only sufficient milk for the nourishment of one calf she is capable of yielding food sufficient for two or three. Nor is this all; the composition of the milk of some of the leading dairy breeds has been so modified by selection and environment that it is no longer suitable as it comes from the cow as food for any calf, much less for the calves intended for the dairy.

On farms where dairying is one of the leading pursuits constant improvement in the quality of the stock should be the fixed aim of the farmer. One of the chief means to this end is the raising of the heifer calves from the best cows. I do not consider it best for either cow or calf to have the cow milk directly up to calving, though the majority of dairymen will not need to take any extra precautions to avoid this extreme. On the other hand, atavistic tendency of the cow toward the primitive type giving only sufficient milk for the needs of her young, should be discouraged by the effort to prolong the milking period. A six weeks' rest allows the cow to recuperate her energies