

THE DAIRY

WHEY AND WHEY.

One Kind Fattens Pigs and Calves, the Other Is Worthless.

A year or so ago, when dressed pork was bringing four dollars and five dollars per hundredweight, dairymen pork raisers here said that it was beneath the cost of production. If that is the case the six dollars and seven dollars now paid can leave only a narrow margin of profit. Not long ago I visited a dairy farmer in the next town south of me, and found him standing on a barrel to bind his shocks of tall corn. Passing his hog yard, I noticed some very large, fat porkers stretched on the sward.

"What are you fattening these hogs with?" I inquired.

"I give them nothing but whey from the factory," was the reply, "but they have plenty of it."

This would have been a revelation to some farmers, who always have lank, squalling hogs. I do not recommend, however, that pork should be grown exclusively on dairy swill, for the meat is apt to be soft though sweet. Good, clean, rich dairy swill, like buttermilk, sour milk and whey, together with shorts and a little cornmeal, will make a pig develop physically as rapidly as it should, and insure firm, sweet pork.

Many dairy farmers in this state are producing pork for home consumption very cheaply by the judicious use of the waste from their dairies. If the course they pursue could be emulated by all it would produce quite a revolution here in swine growing methods.

Half of the dairymen, through the negligence and fault of cheese manufacturers, are furnished regularly with an inferior quality of whey that is worth only half value for hog feeding. Rankly soured whey is an abomination in the pig's trough, for it possesses about as much value for swine food as would potatoes and salt for a human diet. A slight degree of acid in whey is essential to give it good feeding value, but when it is so sour that it will sparkle and foam it is not an economical diet to give to swine.

I think that it would behoove every dairymen to estimate as nearly as possible this fall the actual cost of the pork that he has raised. To compare this result with the market value of the meat would cause the producer to do some interesting thinking. Farmers who make milk production a specialty, and who patronize cheese factories, should insist on having a good quality of whey furnished them. Manufacturers should provide better tanks for storing whey, and the whey should be daily sterilized in hot weather to keep it passably sweet. A steam pipe from the boiler could sterilize the whey in a cheap and effective manner.

I can point to as fine calves as were ever grown that were raised the past summer on whey, with the small addition of a mixture of shorts and middlings. White whey denotes that your cheese maker is not getting out of the milk all of the casein and butter fat that he should, and however much your pigs and calves may thrive on the diet, it is too expensive to be long tolerated.—George E. Newell in American Cultivator.

From the New York Dairy School.

When is butter overworked and what is the result of overworking?

When the globules are broken. It is salvelike and will not keep well.

What per cent. of water should well made butter contain?

Not over 12 per cent.

What should be the condition of milk vessels to produce the best results in milk, cream and butter?

Clean, sweet and smooth.

Breed of cows. Give comparative difference in richness of their milk.

First, Jerseys; second, Guernseys; third, Shorthorns; fourth, Holsteins. The Holsteins give greater quantity and equal results in amount of butter with Jerseys.

Food of cows. How does the food and water affect the quantity and quality of milk?

Judicious combination of nitrogenous and carbonaceous foods insure greatest quantity and best quality of milk. Weeds and impure water impair the quality, sometimes rendering the milk unfit for use.

How should cows be stabled to make the most comfortable, and what effect has comfortable quarters and cleanliness on the animals relative to economy of food fed and of results in product?

Let each animal have a box stall. Let it be kept warm, dry, clean and well ventilated. The food manger so arranged as to be kept clean also; effect, less food consumed and more milk and butter produced than if cows lie out of doors and feed at straw stacks.

What Can Be Done.

Last year Dairy Commissioner Brown, of New York, at a dairy meeting said: "We are keeping on twenty acres seventeen cows, four horses, hogs and chickens. All the fodder we use for that stock we raise on twenty acres. We keep Jersey cows that average 300 pounds of butter a year per cow and get about thirty cents per pound for the butter, or about ninety dollars per cow. After deducting all expenses there was a net profit of fifty-six dollars per head. We are using ensilage, and this is our second year. We make butter at a profit of sixteen cents a pound."

"We feed ensilage summer and winter. I do not know of any other means by which we could keep that number of stock on the land, except with a silo. We feed some grain. The past winter we fed three pounds of hay at noon, twenty pounds night and morning of ensilage, and three pounds of clover hay at night. We fed seven or eight pounds of grain with the ensilage twice a day. We cut our corn for the ensilage, and never put it in whole. We use the southern corn, and find the grain evenly distributed in the ensilage."

EGGS IN WINTER.

Profitable Feeding and Management of Poultry in Cold Weather.

A comfortable poultry house can be cheaply and expeditiously made in the corner of a barn, shed or any outbuilding. It should be cheerfully lighted and face the south or west if convenient. Tanned felt paper makes a good lining and is obnoxious to vermin. The house should be divided into pens, large enough to hold twenty fowls and no more. Fowls do better in small colonies. The laying stock must not be crowded, or they will not be layers long. The temperature in the coldest weather should be high enough to keep the water from freezing—at any rate, warm enough to prevent the combs of the layers from freezing. A wooden floor is better than any other kind. In the cold weather the best earthen floors will get damp and keep so, and damp is disease and death to poultry.

The best roost is a 2 by 4-inch scantling, put broadside over two 12-inch boards, forming a platform to catch the droppings, which as manure is worth seventy-five cents to one dollar per barrel. Heavy fowls should not have to jump more than eighteen inches. Each pen should contain a dust bath, so that the fowls can roll in the dry dust and keep down lice. A small box to hold broken oyster shells, old mortar, gravel, crockery broken into small pieces, etc. Some of these substances are absolutely necessary to furnish grit to grind up the food. They are the hen's teeth. A certain amount goes to furnish lime for the egg shell, but much of the lime for this purpose can be given in the shape of proper food.

The hens should be kept in constant activity. A lazy hen is never a laying one. Cut straw, hay, chaff or dry leaves should be scattered liberally on the floor of each compartment, and in this all grain fed should be thrown, so that the hens will be kept scratching for it. A cabbage suspended from the roof or ceiling high enough to make the hens jump at it is a capital way of keeping them busy. Occasionally substitute a piece of raw liver, lights or any tough sort of meat for the cabbage. In very cold weather the chill should be taken off the water for drink.

Laying fowls require plenty of fresh water, hence the importance of having the house warm enough to prevent water freezing. Take away all the male birds from the laying hens. The cock bird is a nuisance in the pen of layers. He not only monopolizes the most of the food, but teaches the hens to break eggs, and so learn to eat them. Besides, the stimulating diet is too fattening for him, and will ruin him as a breeder.

In the cold weather of winter a warm meal in the morning is necessary to start and keep up a steady supply of eggs. A good plan is to throw all the waste of the kitchen, in the shape of meat scraps, pieces of bread, uneaten vegetables, etc., into a pot; heat up in the morning till nearly boiling, and then mix bran, provender, shorts, or whatever is most abundant or cheap on the farm, into the hot mess, distilling a small quantity of red pepper before mixing. Let the mixture stand for a few minutes until the meal is nearly cooked; then feed in a clean trough, with laths over it to keep the hens from jumping in and fouling or wasting the feed in their eager anxiety. Feed only enough of this soft stuff to barely satisfy, never enough to gorge.

When a hen has had so much food that she will go into a corner and mope she has had too much, and if the over-feeding is continued will soon cease to lay. The laying hens are the active ones. If food is given at noon it should be oats, and scattered among the litter on the floor. This meal should be light. The last food in the afternoon should be generous. Each hen should be sent to roost with a full crop to carry her over all the night. Green food in the shape of vegetables, usually grown on every farm, will be relished by the layers. Cabbages, turnips, carrots are generally the most convenient. Small potatoes boiled and mixed with provender or bran is a good change for the morning meal.

Some of the above named vegetables should always be in the pens of the layers. There is no danger of their eating too much. Red clover hay steamed, chopped and mixed with bran and given while hot is one of the healthiest foods for the morning meal. Meat in some shape must be given at least twice a week, to furnish blood making material. Hens fed on meat lay well. If given no meat the hens will eat their eggs and pick feathers from one another. In cold weather warm the grain feed.

What would be generous and stimulating diet for Leghorns, Minorcas and others of the Spanish family would be too fattening for Plymouth Rocks or Brahmas. As before stated, give enough to keep the hens active. When meat is given it is not necessary to give so much grain. For instance, if meat is fed at noon it will be only necessary to scatter a few handfuls of oats in each pen to keep the inmates at work. When a hen becomes too fat she will lay soft shelled eggs. Where plenty of meat is to be had as one of the cheapest articles of food a greater quantity of oats may be given. Wheat is the best all round food. The waste of the farm in conjunction with meat and the hot morning meal and exercise will bring plenty of eggs.

Beyond question the best all round fowl for the farmer is the Plymouth Rock. The two best breeds are the Plymouth Rock and the White Leghorn, for the reason, as the tables published in a preceding part of the report prove, that the Plymouth Rocks put on flesh more rapidly, and the White Leghorn lays more eggs than any other of the standard breeds. Closely following come the Wyandottes as an early flesh producer and layer. Then follow the Brahmas, but they are slower in development. Another advantage in keeping Plymouth Rocks and Leghorns is that while the Plymouth Rock hens are hatching chickens, after laying all winter, the Leghorns (being non-sitters) will go on laying, and pay the expense incurred while the other breed is sitting.

—Report of Ottawa Central Experimental Farm.

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