

d then son
ent summer
ivation is a
may be prac
As soon as
flow allow
and then
owing again
CH LAND
much had
p down the
systems of
ble to seed
his farm or
ment pas
showy are of
le to be do-
not kept
ag is advi-
ed to pull
have sor-
frequently
is instaur
the grain
for an ear
ped only be
in chemical
ever, is not
s of ma
pounds of
water are of
bloom will
e also had
raying rat
Contest
ensive is
the world's
gar center
fig. Co. of
Farm and
Mr. Grinn
N. through
aggregating
and sugar
test them
The great
J. W. E. W
inter see
The second
John, Tru
57, Maple
River, Ont.
Maple Bos.
In addi-
sh went to
24 prin
see make
test them
each with
est. 835 N.
on. F. G. G.
over 901
Mapleton,
10 prin
see, then
see, then
were dis-
es of the
r. Con-
have had
of ac-
and grain
le desire
that the
maple is
that the
for at
have ex-
contest is
sufficient
in quality
er. The
made for
under 1
to sell
to grant
oft sup

Issued
Each Week

FARM AND DAIRY & RURAL HOME

a Year
Only \$1.00

Vol. XXXII.

FOR WEEK ENDING JULY 17, 1913

No. 29

HOW TO UTILIZE WHEY FOR HOG FEEDING

J. A. Macdonald, Carleton Co., Ont.

Has Whey a Value of 20 Cents a Cwt.? An Opinion on How to Handle the Whey to Get Best Results. Feed Combinations that Have Given Good Results.

ACCORDING to the present price of hogs, whey should be worth 20 cents a cwt. Yet a great many farmers attach little or no value to whey. Many will not haul it home from the factory. I know of one factory from which only two or three patrons take away any whey. It is allowed to run off into the drain to waste.

Whey, particularly in these days of high priced hogs, is deserving of better treatment. The people at the Experimental Farms, who have made repeated tests of whey as a hog feed, assert that 100 pounds of whey will make two pounds of pork. As two pounds of pork is worth a good deal at present, some idea of the value of whey for hog feeding may be conceived.

WHEY ANALYSES WELLS

Whey is a valuable pig feed. In every 100 pounds of whey there are about seven pounds of dry matter that the hog can use to advantage. The composition of whey is as follows: Water, 93 per cent.; nitrogenous substances, 0.92 (or nearly one per cent.); fat, 0.35 (more than one-third of a pound of fat in every 100 pounds of whey); milk sugar, 4.65 per cent.; lactic acid, 0.33 (or one-third of a pound in every 100 pounds); ash, 0.75, or three-quarters of a pound in every hundred.

These elements of food value contained in 100 pounds of whey, should produce at least two pounds of live weight in pigs. It has been my experience that whey, fed judiciously in combination with other feeds, will give such results.

I find that among the best feeds to mix with whey is ground barley. Barley is not half appreciated by hog feeders. It has repeatedly been shown to be equal in every way to corn, the great American hog fattener.

DAMAGED FLOUR WITH WHEY

Another excellent feed to use in conjunction with whey is damaged flour. This damaged flour can often be purchased for \$2.50 to \$3 a barrel, and is dirt cheap at that price. When feeding damaged or sour flour it should be soaked in the whey for about a half a day. I know of a feeder who used some 10 barrels of damaged flour last summer, which he fed in this manner and with splendid results. As a result of feeding this mixture the hogs were finely developed, had a good growth of bone and were just the packers' ideal.

That is one effect of feeding whey; it stretches out the hog. Besides being food, whey is a medicine to the hog. It keeps him in health and good condition. It has a cooling effect on the heated blood, which condition is brought about by heavy grain feeding. In fact, when feeding whey, a larger quantity of meal may be profitably fed with consequent more rapid gains. A whey-fed

hog will show greater daily gains than will one that is not whey fed

WHEY FOR EXHIBITION FITTING

Fat fitting brooding stock for exhibition, whey, in the absence of milk, is almost a necessity. A whey-fed hog is sleek and healthy looking, he is lengthy and of loose conformation, and has not the usual stumpy, bound-up conformation of the hog fed only on dry meal.

As to feeding cornmeal with whey, I do not think it requires soaking. In fact I don't bother soaking ground barley, oats, corn, bran or middlings in the whey. My method is to place the meal in the trough dry, and then pour the whey over it and let the pigs go to it. The wetting of the meal prevents the pigs from nosing it out

Efficiency in Cheese Manufacture

Efficiency is one of the great objects of the modern business man. Competition is so keen that he cannot afford to overlook a single item that spells profit. Manufacturers who once destroyed their by-products now look to them for their entire profit. Waste is a thing not to be contended.

Cheese factories can scarcely be said to be running at highest efficiency when such a valuable product as whey is allowed to waste. The whey must be utilized if the cheese industry is to hold its own. How? Mr. Macdonald offers one solution in the article adjoining.

of the trough. The pigs will mix it sufficiently, though they are sure to drink most of the whey first, so that enough whey is mixed with the meal to moisten it, and none is wasted.

SOUR WHEY NOT INJURIOUS

I do not think that souring, unless gone to an extreme, injures the whey very much for feeding pigs. In fact, if the pigs are being pushed heavily on meal, I believe that the sour whey will have a more beneficial effect on the hog's system than sweet whey. But when hogs are fed moderately the sweet whey has greater nutritive value.

Whey should always be pasteurized at the factory before being taken away by the patrons. This is easily done by inserting a jet of steam into the whey in the tank and heating to 160 degrees which is sufficient to destroy all germs of putrefaction. In hot summer weather pasteurizing is almost indispensable. It is a simple matter for the cheesemaker or his assistant to do and takes very little time; besides, he has the pleasure of having his whey tank and premises clean and sweet.

A WELL KNOWN FAD

The condition of some whey-tanks is scandalous. They are too often found to contain a reeking,

disagreeable-smelling mass, which pollutes the atmosphere within a half-mile of the factory. Cheesemakers that allow their whey-tanks to get in this condition take no pride in their work, and should not be reengaged.

Dairymen who support cheese factories make a big mistake when they do not avail themselves of the hog to aid them in making money from the by-products. The attitude of dairy farmers towards the pig has always been an unfriendly one. For every cow kept on a farm there should be at least two pigs. A man that keeps 20 cows should fatten 40 pigs every summer which means the keeping of five sows. If he does so he will find, perhaps to his amazement, that this branch of the business is bringing in more money than are the cows.

Alfalfa Questions Asked and Answered

R. E. Gunn, Ontario Co., Ont.

What does a ton of alfalfa cost? We can give figures on the handling of an average acre covering a year when we have taken off three crops. This cost is as follows, the computation being based on one acre yielding four tons in three cuttings:

Rent	\$ 5.00
Cutting	1.20
Tedding	2.10 (each crop an average of 3 1/2 times)
Colling90
Drawing in and mowing	2.97
Seed on four-year rotation	1.00
Manure	1.20
Machinery charges90

Total

You can readily understand that the season and the work required might easily run this up to \$5 a ton, but that, I figure, would be the limit.

In regard to the feeding value I can but refer my reader to such authorities as Cockburn and Henry, or if these are not handy let the cow herself decide by placing both alfalfa and clover in front of her. She will give as good results from six pounds of alfalfa as 12 pounds of clover, and would leave the clover any time for the alfalfa. (Understood that she gets the same concentrates with each).

Do we consider it advisable to have any considerable acreage? Well we had 10 acres four years ago and have 125 acres now. This, I think, speaks for itself.

AS TO CURING

Have we had any trouble curing and saving the crops? We have, but with the gaining of experience we get each succeeding crop in better shape. We have come to the conclusion that the best way to cure the crop is in the coil and with coil caps. We are busy getting out caps now of heavy sheeting and intend using them. It will undoubtedly add to the cost of harvesting, and the time consumed, but will be beneficial in the long run for we will be insured a barn full of hay that has its full feeding value; and after all that is really what we are after.

(Continued on page 12)