

ACKNOWLEDGMENT

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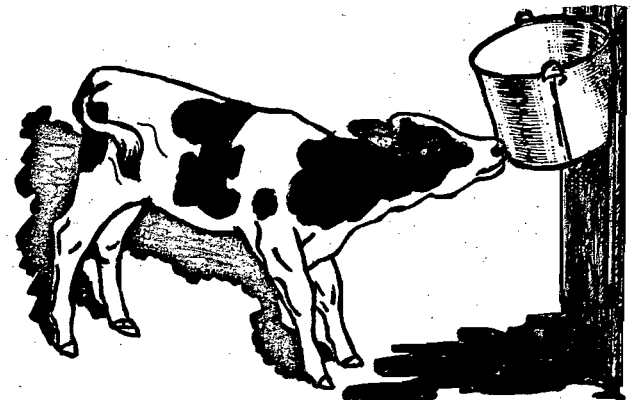
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UC Cooperative Extension

Beef Cattle

RAISING VEAL ON MILK REPLACER



AGRICULTURAL EXTENSION SERVICE
UNIVERSITY OF CALIFORNIA

CoXT 100 Sonoma County

RAISING VEAL ON MILK REPLACER

by

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"Can you raise veal calves on milk replacer and show a profit?" is the question raised many times.

In order to answer this question many factors must be considered:

1. Cost of calves
2. Breed of calves
3. Market outlets
4. Type of milk replacer used
5. Facilities for raising calves
6. Death loss

1. Cost of Calves

Generally calves are purchased at less than a week old. Costs will depend on the size of calf, breed of calf, and the current market situation. These young calves are purchased by the head with crossbreeds, beef breeds and Holsteins costing the most and the Jerseys costing the least. Prices may range from \$35 per head to as low as \$8 or \$9 per head.

2. Breed of Calves

Holstein calves, beef breeds and crossbreeds will generally be easier to raise than either of the Jerseys or Guernseys. They will usually sell for more money per pound at the time of sale and will be in greater demand on the open market.

3. Market Outlets

The market for fed veal is limited and market demands change continually. Prior to starting in the business some effort should be made to find a market other than having to depend on the local auctions for all sales.

Because of the changes in market demands due to the various holidays and the seasons of the year, it is sometimes difficult to keep a steady flow of veal calves going to a good sound, high-priced market.

A cost study during 1966 was conducted to determine what the actual costs would be using the normal avenues of business. This included buying milk replacer on a retail basis and buying and selling the calves through local auctions. It should be noted that this study was only on one ranch.

Fourteen calves of various breeds and weight were purchased through a local auction on the dates indicated in Table I. These were fed on a diet of milk replacer containing 22% Crude Protein, 20% Crude Fat and 1% of Crude Fiber, plus added vitamins, minerals, and medication. These calves also had a pelleted grain mix before them at all times.

This milk replacer was fed according to the manufacturer's recommendations. No other water was made available to the calves. The calves were fed a minimum of 77 days.

It should be noted that in February of 1966, the prices paid for calves were high and later at the time of sale the market had dropped. Because of the drop in the market price, the owner only sold what appeared to be the best calves to establish a sale price. The others were taken off the milk replacer and put out to pasture to minimize losing more money.

In this study, a substantial loss was incurred on cost of calves and feed alone. Had other costs been included such as depreciation, interest on investment, labor, death loss and taxes, the loss would have been greater.

Seven of the calves were raised in individual pens and seven were raised in a group pen. (There was more of a problem in the group pen to keep it clean as it did not have a slatted platform in it.)

The calves were fed twice a day receiving a maximum of 12 quarts per day of milk replacer. The cost of the milk replacer was \$19.90 per cwt. and the grain cost was \$5.80 per cwt.

It was estimated that \$1.50 worth of shavings per calf and 11 cents per calf for preventative medicines were required.

These pens should be designed so that they can be cleaned easily. Calves fed high levels of milk replacer will create an excessive amount of moisture increasing the problem of keeping the calves clean and dry. The use of a slatted platform with or without bedding is desirable to keep the calves up off the damp floor. Elevating the stall and using galvanized hardware cloth for the floor has also been used successfully. There should be adequate ventilation without any severe drafts.

A necessary part of the facility for raising veal calves is a place to wash and care for the equipment and to store feed and supplies.

The mixing of the milk can be done with some type of mechanical agitation. Where large amounts are involved an old style washing machine may be used. A wire beater on an electric hand drill will also do a good job of mixing. A source of hot water is necessary for mixing the milk replacer and for use in washing and sanitizing the equipment.

Individual pails or bottles with nipples are very good to use when the calves are starting out. After they are on full feed, teaching them to drink directly from a pail is satisfactory. Care must be used to see that the utensils are cleaned and sanitized.

Another point which should be considered is the use of proper medication for disease treatment. Your local veterinarian should be contacted for assistance in setting up a proper disease prevention and treatment program.

6. Death Loss

This is a problem many people fail to take into consideration. This loss can be very high if great care is not given to disease control and other sanitary practices. The death loss will usually average about 5% for the average calf raiser.

The preceding information provides an outline to be considered. The next step is to see whether a profit can be realized based on the preceding information.

The normal market will fluctuate between 23 and 37 cents per pound. The market usually asks for calves weighing 180 to 220 pounds and must be milk fed to meet top market grades and bring the top dollar.

There is an extra special veal market developing in the United States which calls for a 295 lb. veal and brings 45 cents per pound. These calves are fed and raised under special conditions.

4. Type of Milk Replacer Used

The type of milk replacer used will partially determine the rate of growth that will take place. There are a number of different brands of milk replacer on the market and the one to use will depend on several factors. The major difference between milk replacers is due to variation in the Crude Protein, Crude Fat, and Crude Fiber content. There are also differences in how these milk replacers dissolve into solution. They are all fortified with vitamins, minerals and usually some medication. It should be recognized that as the Crude Fat or Crude Protein is increased, the price will increase. Another point to keep in mind is that as the protein and fat increase, the fiber is lowered.

Caution must be used in feeding milk replacer. The milk replacer containing the higher levels of fat will tend to cause more digestive problems in the calves if care is not given in the amount used and how it is handled. The milk replacers with the lower fat levels are usually not as difficult to use; however, you will not get the growth rate that is needed in order to market these calves at the proper weight in 80 days or less.

5. Facilities for Raising Calves

The facilities required for raising calves on milk replacer are different from those where the calves are running with cows. These calves should be confined to small individual pens so designed that they are unable to suck each other. This is necessary in order to reduce the spread of disease.

Calf No.	Breed	Date Purch.	Weight 3/16/66	Weight 5/9/66	Days On Feed	Cost of Calf	Lbs. of Milk Replacer	Cost of Milk Replacer	Grain Fed Free Choice	Tot. Cost Of Feed	Cost of Calf & Feed	Selling Weight 5/11/66	Selling Price per cwt	Total Sale Price	Price/cwt To Meet Costs
175	Black W.F.	2/7/66	105 lb.	189 lb.	93	\$ 22.50	153.51	\$ 30.40	300 lbs.	\$ 47.80	\$ 70.30				\$ 37.20
174	Black W.F.	2/8/66	94	172	92	15.00	151.86	30.07	300	47.47	62.47	170 lbs.	\$ 22.75	\$ 38.68	36.32
172	Brown Swiss	2/16/66	101	190	84	26.00	138.66	27.45	300	44.85	71.85				37.82
177	Guern.	2/16/66	95	166	84	25.50	138.66	27.45	300	44.85	70.35				42.38
*167	Black W.F.	2/16/66	126	225	84	33.50	138.66	27.45	300	44.85	78.35	230	23.00	52.99	34.82
*169	Angus	2/16/66	82	180	84	19.00	138.66	27.45	300	44.85	63.85	180	20.25	36.45	35.47
170	Guern.	2/16/66	95	176	84	31.00	138.66	27.45	300	44.85	75.85				43.10
*168	White-face	2/16/66	66	120	84	15.50	138.66	27.45	300	44.85	60.35				50.29
*182	Holstein	2/23/66	115	201	77	24.00	127.11	25.17	300	42.57	66.57				33.12
188	Holstein	2/23/66	111	219	77	23.00	127.11	25.17	300	42.57	65.57	210	24.25	50.93	29.94
183	Black W.F.	2/23/66	112	198	77	25.00	127.11	25.17	300	42.57	67.57				34.13
*191	White-face	2/23/66	94	166	77	22.00	127.11	25.17	300	42.57	64.57				38.90
*192	Holst.	2/23/66	115	188	77	25.00	127.11	25.17	300	42.57	67.57				35.94
*194	Holst.	2/23/66	95	186	77	18.50	127.11	25.17	300	42.57	61.07				32.83
Totals			1406	2576	1151	\$325.50	1899.99	376.19	4200	\$619.79	\$946.29	790	\$90.25	\$179.05	
Average 14 Head			100.4	184.0	82.3	\$ 23.25	135.71	\$ 26.87	300	44.27	67.59	197.5**	22.56**	\$ 44.76**	\$36.73

* Raised in a group pen

** Average on 4 head