Technical Bulletin

Deworming Lactating Dairy Cows During the Transition Period

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Summary Points

Deworming lactating dairy cows is a venture beyond treating disease. Although most dairy cows have sufficient immunity such that parasitic disease will not occur, they're not immune from production losses caused by parasite exposure and the subsequent development of infection. Internal parasites interfere with efficient production and, therefore, the strategic deworming of lactating dairy cows is designed to prevent production losses caused by these parasites.

Whole-herd deworming in late fall or early winter is a good strategy to maintain a parasite-free herd throughout the winter months in northern climates; however, a separate strategy for spring and summer to control internal parasites is required. During this period, individual animal treatment provides the very best control if production losses are to be prevented. Management may find, when feeding transitional groups in freestalls, deworming the cows via the feed (TMR) is cost-effective and laborsaving.

Research has shown that dairy cows dewormed at freshening demonstrate a greater production response than those dewormed later in lactation. It is apparent that internal parasites can cause additional nutritional stress to animals already stressed from freshening for the next 60 to 90 days. The higher producing cows tend to be under the greatest stress and therefore, appear to be harmed the most by internal parasites during this period.

Cows housed in confinement during lactation may not be exposed to parasites until they are turned out when dry. Many dairy operations house their dry cows on dirt lots or pasture where parasite contamination is highest. This allows cows to enter the milking line with a high worm load acquired during the dry period if no treatment is given.

By removing internal worm parasites (both mature and immature) during the pre-fresh period just prior to freshening, cows are able to better handle stress associated with transition and early lactation. Since cows are continually entering and leaving this transition group, a set deworming schedule should be established for treating the whole transition group with feed-grade fenbendazole at the rate of 5 mg/kg (Safe-Guard® - Intervet) of body weight.

In order to minimize extra deworming cost by deworming some cows twice during this period, a schedule should be designed which considers the length of the transition period and management practices of the farm. The following are two examples of how to set up a transition group-deworming program on farm:

14-day Transition Period – Treat every two weeks.

21-day Transition Period – Treat every three weeks.

This type of deworming can be implemented with most feeding programs. It is best to choose a day during the week to implement the program (i.e., on Monday, or deworm cows on the BST injection day, etc.). Having a calendar in the feed room as a reminder is advisable.

The following feeding chart (Appendix 1) can be used to determine how much Safe-Guard 0.5% (fenbendazole) pellets or meal is needed to treat a particular transition group.

Appendix 1: Amount of fenbendazole (0.5%) needed for ration.

Intersect number of cows on the left-hand side with the average weight located across the top to give you the pounds of pellets/meal needed.

Number of Head	1000 Lb Cows	1100 Lb Cows	1200 Lb Cows	1300 Lb Cows	1400 Lb Cows	1500 Lb Cows	1600 Lb Cows
1	1.0	1.1	1.2	1.3	1.4	1.5	1.6
2	2.0	2.2	2.4	2.6	2.8	3.0	3.2
3	3.0	3.3	3.6	3.9	4.2	4.5	4.8
4	4.0	4.4	4.8	5.2	5.6	6.0	6.4
5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
6	6.0	6.6	7.2	7.8	8.4	9.0	9.6
7	7.0	7.7	8.4	9.1	9.8	10.5	11.2
8	8.0	8.8	9.6	10.4	11.2	12.0	12.8
9	9.0	9.9	10.8	11.7	12.6	13.5	14.4
10	10.0	11.0	12.0	13.0	14.0	15.0	16.0
11	11.0	12.1	13.2	14.3	15.4	16.5	17.6
12	12.0	13.2	14.4	15.6	16.8	18.0	19.2
13	13.0	14.3	15.6	16.9	18.2	19.5	20.8
14	14.0	15.4	16.8	18.2	19.6	21.0	22.4
15	15.0	16.5	18.0	19.5	21.0	22.5	24.0
16	16.0	17.6	19.2	20.8	22.4	24.0	25.6
17	17.0	18.7	20.4	22.1	23.8	25.5	27.2
18	18.0	19.8	21.6	23.4	25.2	27.0	28.8
19	19.0	20.9	22.8	24.7	26.6	28.5	30.4
20	20.0	22.0	24.0	26.0	28.0	30.0	32.0
21	21.0	23.1	25.2	27.3	29.4	31.5	33.6
22	22.0	24.2	26.4	28.6	30.8	33.0	35.2
23	23.0	25.3	27.6	29.9	32.2	34.5	36.8
24	24.0	26.4	28.8	31.2	33.6	36.0	38.4
25	25.0	27.5	30.0	32.5	36.0	37.5	40.0
26	26.0	28.6	31.2	33.8	36.4	39.0	41.6
27	27.0	29.7	32.4	35.1	37.8	40.5	43.2
28	28.0	30.8	33.6	36.4	39.2	42.0	44.8
29	29.0	31.9	34.8	37.7	40.6	43.5	46.4
30	30.0	33.0	36.0	39.0	42.0	45.0	48.0
31	31.0	34.1	37.2	40.3	43.4	46.5	49.6
32	32.0	35.2	38.4	41.6	44.8	48.0	51.2
33	33.0	36.3	39.6	42.9	45.2	49.5	52.8
34	34.0	37.4	40.8	44.2	47.6	51.0	54.4
35	35.0	38.5	42.0	45.5	49.0	52.5	56.0
36	36.0	39.6	43.2	46.8	50.4	54.0	57.6
37	37.0	40.7	44.4	48.1	51.8	56.5	59.2
38	38.0	41.8	45.6	49.4	53.2	57.0	60.8
39	39.0	42.9	46.8	50.7	54.6	58.5	62.4
40	40.0	44.0	48.0	51.0	54.0	60.0	64.0
41	41.0	45.1	49.2	53.3	57.4	61.5	65.6
42	42.0	46.2	50.4	54.6	58.8	63.0	67.2
43	43.0	47.3	51.6	55.9	60.2	64.5	68.8
44	44.0	48.4	52.8	57.2	61.6	66.0	70.4
45	45.0	49.5	54.0	58.5	63.0	67.5	72.0
46	46.0	50.6	55.2	59.8	64.4	69.0	73.6
47	47.0	51.7	56.4	61.1	65.8	70.5	75.2
48	48.0	52.8	57.6	62.4	67.2	72.0	76.8
49	49.0	53.9	58.8	63.7	68.6	73.5	78.4
50	50.0	55.0	60.0	65.0	70.0	75.0	80.0

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