

CALVING EASE

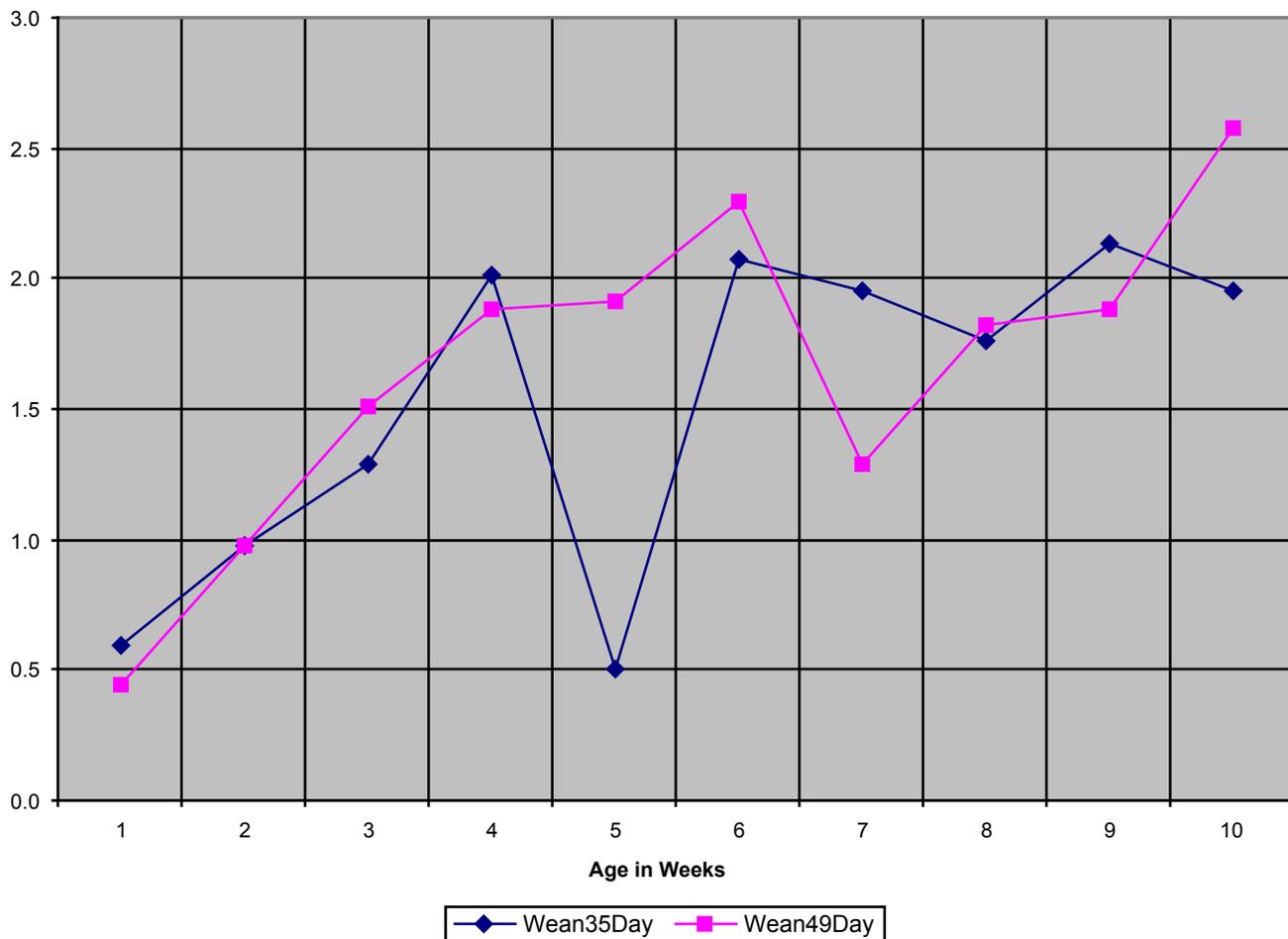
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WEANING CALVES

The great weaning debate? When to wean? How to wean? NO, NO, NO. This is about weaning stress. As part of research on a completely different subject, scientists at the University of Tennessee weighed their calves weekly for 10 weeks. Some of them were weaned at 5 weeks while others were not weaned until 7 weeks. These weights, therefore, reflected post-weaning stress. The results are below. Remember that these are pounds of gain per day.

Ave. Daily Gain in Calves Weaned at 35d and 49 days



At both times (35 days=5wks)(49 days=7wks) weaning resulted in observable decreases in rate of gain (see above - 75% for 5 week weaning and 44 % for 7 week weaning). Because the research was not designed to measure effects of weaning stress and its small numbers, we can't rely too much on the exact values of 75% and 44%. Now for the rest of the story!

WHAT'S THE MESSAGE FOR ME?

FIRST, no matter when the weaning took place there was a drop in rate of gain. The average daily gain for calves weaned at 5 weeks dropped from 2 to .5 pounds per day during the week following weaning. The later-weaned calves also decreased, from 2.3 to 1.3 pounds per day during the same period. **That means we need to watch very carefully the calves we have just weaned.** Those decreases of 75% and 44% suggest that the days immediately after weaning are very stressful for those calves. This is in spite of consuming at least two quarts of calf starter grain daily.

What do we know about stress levels and the immune system's effectiveness in fighting off disease? Stress levels go up and disease resistance goes down. **This is an ideal time for respiratory illness to strike** - droopy ears, don't drink water, grain consumption down, and runny noses the first day, and an elevated temperature the next day frequently accompanied by coughing.

SECOND, the stress period seems to be quite short. Note on the graph how quickly the rate of gain bounces back. How long do we need to watch these calves closely? On the average, only about 5 to 7 days.

THIRD, earlier weaning (in this case 5 rather than 7 weeks) seems to result in higher stress levels as measured here by decrease in rate of gain. Notice in the graph that the 5 week-weaned calves dropped 1.5 pounds gain per day in contrast to the 7 week-weaned calves dropping only 1 pound gain per day. This difference needs to be understood in the context that these researchers had a small number of Holstein bull calves. But, if anything close to this applies to our calves, **the earlier we wean, the more intensive our management needs to be for these calves. This seems to be especially true for the 5 to 7 days post-weaning.** If you have more than one primary calf-care person, special care arrangements may be necessary for these "high-risk" days for these calves. Or, you may wish to wean on Monday if you will be there for the next five days to watch them rather than depend on weekend relief workers to make the diagnoses.

Source: J.D. Quigley,III, J.J. Rejman, and K.R. Martin "Response of Peripheral Blood Mononuclear Cells to Mitogenic Stimulation in Young Calves," Journal of Dairy Science 77:259-263.

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