

Beef Session V

Cow-Calf/Feedlot Combined

Is Preconditioning Doomed to Fail?

Dr. Wade Northington, *Presiding*

Is Preconditioning Doomed to Fail? An Illinois Extension Veterinarian's Viewpoint

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I have been asked to present my views as a state beef extension veterinarian on the subject of preconditioning and more specifically is the program or concept doomed to fail.

One of the first points I would like to bring out is that the *name* may indeed be doomed because of many past abuses of the term to describe cattle for sale. However, the concept or program of preparing feeder cattle and calves to more easily make the transition from the grazing/nursing phase of production to the feedlot phase will *never* be doomed. Early work by Herrick and Pickard demonstrated the medical as well as economic advantage of the concept. Herrick et. al. coined the term Certified Preconditioning while Pickard et. al. used the term Certified Health Management to identify feeder cattle and calves which had been processed to make this transition from one phase of production to the feeding phase with less health problems. In the early days of both these programs and many other similar ones administered by local cattlemen's groups, local practitioners and even feed companies the success of "preconditioning" was noticed by other cattlemen and persons involved with marketing of cattle. Some of these "others" elected to benefit from the program without actually participating in the proper steps to insure the cattle were truly "preconditioned". From this abuse of the name of the concept or program came as much adverse publicity in a short period of time as positive publicity was produced over many hours of honest evaluation of the concept through various trials and demonstrations.

Still today, there are individuals or groups within the cattle industry which are taking unfair advantage of the program name in states which have well established "preconditioning" programs without full participation on their part. Whatever their motives, they are destroying the name of "preconditioning". On the other hand, some enterprising practitioners, extension personnel, and marketing people who realize the value of the concept are designing programs under new names with renewed interest. Names such as "preweaning vaccination", "preweaning

processing", "prestress vaccination", and "maximum immunity minimum stress" are being used in areas and states which realize the name "preconditioning has been misused by many. To get the same end result these groups have elected to *rename* the same basic program.

From the above information, I believe the concept of "preconditioning" whether it is named that or not is a goal of both cow-calf operators and feedlot personnel who are trying to work toward improvement in all segments of the beef industry. The name may be doomed but not the goal!

I have included some information from a research project which was done at the Dixon Springs Agricultural Center which involved both "preconditioned" and non-preconditioned feeder calves. The study was not a direct comparison of the two concepts but rather a look at the biochemical profile of each group of calves. An interesting finding from the project was the increased serum cholesterol of the non-preconditioned feeders over the "preconditioned" calves which persisted through the first four weeks in the feedlot. Serum cholesterol is a precursor to serum cortisol and can be used as a measure of the amount of "stress" which an animal is undergoing. This information is presented to offer evidence that the concept of "preconditioning" does have some medical basis and can be of benefit to the overall health of the feeder calf when going from one phase of production to the feedlot.

In summary, I realize the age old argument that "the concept is good but who is going to pay for it?" has been put up against the program. However, the cow-calf operator can realize a return over investment by a few additions to the program by whatever name it is called. Re-implanting and internal/external parasite control as short as thirty days prior to sale will add extra pounds at sale time. How many of you have been told by your cow-calf clients they did not want to do those procedures as the buyer would benefit? Recent trials would indicate the advantage to both parasite control and implanting is greater in the first 30-60 days following treatment than later. These extra pounds alone

more than pay for the immunizations and the labor. And, the feedlot operator gains by a reduction in morbidity/mortality, lower treatment cost and calves which go the bunk much quicker. These benefits to both segments of the beef industry can be realized without a premium price being placed on the calves. The cow-calf operator does not

need a premium price per pound as he gets a premium price per calf because of increased pounds sold. The feedlot may eventually pay a premium when a positive reputation is established but it's not necessary for the program to be successful.

TABLE 2. Comparison of weight, serologic and parasite load data of certified preconditioned and non-preconditioned feeder calves.

Date	Certified Preconditioned Calves					Non-preconditioned Calves				
	Mean Weight (lbs)	Geometric Mean Serological Titers			Mean EPG (*)	Mean Weight (lbs)	Geometric Mean Serological Titers			Mean EPG
		BVD (1)	IBR (2)	PI3 (3)			BVD	IBR	PI3	
12/1	460.2 ^a	—	—	—	—	—	—	—	—	—
12/2	—	—	—	—	—	443.5 ^b	—	—	—	—
12/3	442.7	1.55	4.26	3.31	409	430.5	2.14	0	5.59	1466
12/30	474.1	28.04	5.04	59.91	—	450.5	27.22	0	65.54	—
27 day gain	31.4					20.0				

ADG: .51/day from 12/1 (CPC)
 .35/day from 12/2 (NPC)
 1.16/day from 12/3 (CPC)
 .84/day from 12/3 (NPC)

^a 3.8% shrinkage.
^b 2.9% shrinkage.
 *Eggs per gram feces.
 1-Serum neutralizing test.
 2-Serum neutralizing test.
 3-Hemagglutination-inhibition test.

Block Chart of Means

