

Is Preconditioning Doomed to Fail? A Michigan Practitioner's Viewpoint

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On October 16 and 20, 1986 my partner in the cattle business and I acquired from a reputable order buyer in West Virginia 177 calves which had been purchased in sales barns. The individual average pay weigh was 553 pounds. The cattle arrived at a backgrounding lot in Michigan weighing 526 pounds. Stated in terms used in the trade, the calves experienced a hauling-in shrink of 4.9%. On arrival, they were placed on long hay and converted to a ration of chopped hay, corn silage, corn grain, and soybean meal. The calves when unloaded appeared to be "right". Bawling was minimal and by-and-large all went up to the bunk and started to eat. On day two, after arrival of load one, 18 animals were pulled for treatment. To bring this non-fictional narrative to a close, to date we have experienced a morbidity (that is treatment rate) of some 54%, a mortality rate of about 4%, and a mortality/morbidity percentage of about 7.5%.

Do you think our experience would have had a happier ending if the cow/calf operator would have properly preconditioned these calves?

In fact, let us conduct a totally unscientific survey. Responses will be directed to:

1. My primary bovine practice activity involves . . .
 - A. _____ Cow/calf in which preconditioning is practiced.
 - B. _____ Cow/calf in which preconditioning is NOT practiced.
 - C. _____ Feedlot cattle fed to finish.
 - D. _____ Feeder cattle in a backgrounding or "warm-up" environment.
 - E. _____ List by the above letters, that combination which best describes your bovine practice activity.
2. Opinions on the scenario about the W-H sale barn calves.
 - F.i _____ Preconditioning would have benefited this scenario.
 - .ii _____ Preconditioning would PROBABLY have benefited this scenario.
 - G.i _____ Preconditioning would have NOT benefited this scenario.
 - .ii _____ Preconditioning would PROBABLY HAVE NOT benefited this scenario.
 - H. _____ Do not know whether preconditioning would have benefited this scenario.

The results of the survey are reported in Table II.

There is a fable which many of you have heard as children.

It is the tale about three blindmen who have been asked to examine an elephant and provide a description of it. As you recall, each describes the different anatomical parts which he happened to inspect. An accurate description of an elephant never resulted.

The illustration is offered in that there be a corollary between the fable and the preconditioning of feeder cattle. Preconditioning has a variety of definitions and frequently means different things to different people.

A comprehensive summary of Certified Precondition for Health (CPH) programs in 12 states (Table 1) was recently published in TechAmerica Talks (1). As one will quickly recognize, there exist inconsistencies from one state CPH program to another. Certainly, there are common denominators which exist among programs.

If one goes further and examines generic programs that come down the road loaded in cattle trailers, the differences between "preconditioning" programs may vary even more dramatically. Some of these cattle may have been given an antibiotic when they were loaded or perhaps a "four-way shot" or possibly both were administered. This activity in no way is or should be construed to be true preconditioning of feeder cattle. Another activity which would appear to be suspect and varies widely as to its components is the processing of cattle in sale barns. Although these procedures may not be portrayed by the veterinarians involved with them to be true preconditioning, the ultimate purchaser/cattle feeder frequently feels he/she has purchased preconditioned cattle.

It may be safe to conclude that even though the formal concept of preconditioning as an entity has been around since 1966, when Herrick and his co-workers introduced it, there still remains a divergence of opinion as to what the components should be.

Data (2) indicate that 70-80% of the disease loss experienced in feeding out cattle results from respiratory disease. Death loss treatment costs and unproductivity related to the bovine respiratory disease syndrome is measured in the millions of dollars. We have all interfaced with this issue, and know the numbers all too well. Cattle feeders with whom I work accept that they will share in these losses as a matter of fact. A corollary would be death and taxes. It continually takes a great deal of effort on the part of all of us to overcome this, "we accept that this is our fate" attitude when it comes to sick and dead feeder cattle.

TABLE 1. Preconditioning Programs in 12 States.

	State											
	ND	SD	NE	KS	MN	IA	MO	IL	OH	KY	TN	GA
Year CPH program began	78	82	81	80	79	66	78	83	79	79	78	80
Number of special sales	15	3	6	5	5	50	?	5	5	3	1	5
CPH calves in 1983 (x 1000)	96	170	60	?	11	350	200	11	3	4	?	?
No. in CPH sales (x 1000)	35	?	?	2	3	50	?	6.5	1.2	2.5	?	?
Color of tags	Green	Green	Green	Green	Green	Green	Gold	Green	Yellow	Blue	Orange	White
Cost of tags (¢)	10	10	7	25	10	5	10	10	90	35	26	4
Vet required to vaccinate?	No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No
Management requirement:												
Ownership (days)	60	60	60	60	60	60	45	60	60	60	60	60
Dehorned (days)	30	X	21	X	21	21	X	X	X	30	X	30
Castrated (days)	30	X	21	X	21	21	X	X	X	30	X	30
Weaned (days)	30	30	30	30	30	30	21	30	21	30	30	30
Feed/water adjusted (days)	X	X	X	X	X	X	X	30	X	X	X	X
Dewormed (days)	No	No	No	X	21	No	21	30	X	30	X	30
Grub/lice (days)	30	X	X	X	21	21	21	30	X	30	X	30
Vaccination required (days)	30	21	21	21	21	21	21	30	21	30	21	30
Clostridium (species)	7	7	4	7	1	7	7	7	7	4	3	7
IBR-PI 3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BVD	Yes	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
Haemophilus somnus	No	No	No	Yes	No	No	No	No	No	Yes	No	No
Pasteurella	No	No	No	No	No	No	No	No	No	No	No	No

? = Not reported, X = Required but days not specified

TechAmerica Talks, Spring 1986, Vol. 1, Issue 2.

In 1973, Hoerlein (3) stated that it seemed logical that a disease syndrome (bovine respiratory disease) which requires several etiological components for its development ought to be controlled by removing or limiting the effects of any of those components.

One must agree with this hypothesis and that the cattle industry sustains economic losses of sizeable amounts attributable to the BRD syndrome. However, it must be recognized that in these depressed times for agriculture, there must be a return to investment that is clearly visible. This may be difficult for the feedlot owner and cow/calf operator to envision.

Unfortunately the results obtained from preconditioning have not always indicated a financial benefit to the end user of the procedure. Pritchard in a South Dakota controlled study (4) demonstrated that feedlot performance data collected through 168 days on feed indicated no difference among the groups in feedlot gain. However, dry matter intake (17.09 vs 16.18) and feed efficiency (5.91 vs 5.48) were both lower for the nonpreconditioned calves. A recent Michigan report (5) enunciates data which may be of interest in this regard as well, in that morbidity percentages in their program varied depending on the capacity of the feedyard in which the cattle were placed. Variability as to mortality existed as well. Levels of management expertise on the part of the feedlot operators may serve to undermine the effectiveness of preconditioning.

A reasonable conclusion may be that a number of variables undoubtedly impact on the ultimate outcome of the

cost/benefits of preconditioning.

Preconditioning to be effective must be the function of the cow/calf operator. There are various levels of management demonstrated by these operators as well. We will agree that motivation may not always exist at a level at which preconditioning will be practiced in a proper manner, if at all. In addition, there has not consistently been demonstrated a financial benefit for the cow/calf operator which warrants the preconditioning to be performed. In Pritchard's trials he noted a 21 pound average increase in sale weights of preconditioned calves over the herd mate controls that had been left with their dams for the identical period of time. (As background, those preconditioned were vaccinated, IBR, BVD, PI³, Clostridia, fourteen days prior to weaning and then held twenty-eight days prior to being shipped 300 miles.) A question arises. Were there sufficient financial benefits for the cow/calf operators involved in these studies for the feed and care provided and the assumption of additional financial risk? The cooperators would have received the economic value of an additional 21 pounds of gain plus any premium that might have resulted because the calves were preconditioned.

In Michigan, the feedlot owner/operators with whom I relate more frequently acquire replacements which have been backgrounded (usually in a pasture environment) and as a result have in some manner or other been previously processed. Because of the validity attached to the CPH program, backgrounded cattle are often presented as being "preconditioned". The term that we feel is more preferable is

“previously processed”. It should be noted that as with the CPH programs, consistency of individual components of this “previously processed” activity vary greatly.

The trend for more and more Michigan cattle feeders to purchase backgrounded or “warmed-up” feeders is definitely the case. Reasons vary, but the one that is given most frequently is the one that implies that the health status is improved over calves.

Because the increased number of animals of this category that are going into feedyards, the feedlot industry and the veterinarians who seve it, should provide input as to those minimum processing procedures which they feel should be prerequisite components of a previously processed program. This is the method by which the CPH program evolved and is an appropriate activity for AABP to address.

TABLE 2. Summary of the Poll of Participants (total 46). Categories and Response codes can be found on page 2.

Category	Respondents		Response				
	No.	Percent of Total	F		G		H
			i	ii	i	ii	H
A	2	4.4		2			
B	9	19.6	2	3			4
C	3	6.5		3(1)			
D	0						
E	32 as:						
AB	4	8.7	1	3			
ABC	4	8.7		4			
ABD	2	4.4	1	1			
ABCD	6	13.0	1	2	2	1	
BC	3	6.5	1			1	1
BCD	2	4.4		2			
BD	5	10.9	1	4			
AC	3	6.5	1	1		1	
ACD	2	4.9	1	1	1		
Dairy	1	2.7					
Totals	46		9	26	3	3	5
Percent of Total			19.6	56.5	6.5	6.5	10.9

(1) “Deads would have been taken out of the group.”

Conclusions:

The CPH programs for calves at the farm or ranch of origin seems to be a sound management practice.

Whether this procedure is sufficiently cost beneficial to the cow/calf producer and/or to feedlot operator necessitates further study and necessitates objective thought processes.

To answer the questions which titles this session, “Is Preconditioning Doomed to Fail?”, my answer has to be . . . , “Probably not, but we had better take a second look.”

Also, AABP should address the issue of minimal requirements of cattle which have been previously processed in the backgrounding environment.

Comments:

1. Seventy-six percent of the respondents indicated an “F” (preconditioning would have been of some benefit) response.
2. Of the 35 respondents who indicated an “F” response, 74% qualified their opinion by indicating an “Fii” (probably of benefit) response.
3. Of the 9 respondents who indicated a strictly “B” category (cow/calf practice that does not involve preconditioning), 44% indicated the “H” (did not know whether preconditioning would have been of benefit) response.
4. The comment of one of the practitioners from the “C” category (feedlot) is noteworthy, in that he/she states that most of the deaths would have occurred during the preconditioning environment.

References

1. TechAmerica Talks, Spring 1986. 2. Meyerholz, G. W., Program Leader, V.M.C.E.S. for Synthesis of Profitability in Agriculture, 84-86, Feb. '86. 3. Hoerlein, A. B.: Preconditioning of Beef Cattle, J.A.V.M.A., 163, (Oct. 1, 1973): 825-826. 4. Prichard, R., Journal Animal Science, Vol. 63, Supplement #1, Abst. #566. 5. Barlett, B., Ritchie, H., and Rust, S. Michigan State Prevaccination Program, three year summary. M.S.V.A.S. Mimeo 83, File No. 21.17, June 86.

Questions & Answers:

Question: On the situation that Dr. Jordan is in, the half lane situation where you're dealing with a much larger feedlot situation that perhaps are available in other parts of the country, perhaps northern Illinois, Michigan, and Indiana, where the producers are not putting in a large number of animals, it may be a one-time buy for them during a certain time of year. Is there a situation where not all the cattle are being handled the same but the pre-conditioned cattle may still have even more of an economic benefit than going to the larger feedlots?

Answer: This is one of the reasons that, when I went back to Illinois from practicing in Western Nebraska, I saw a big difference in the way farmer feeders in the western states pay more attention to their cattle. They utilize veterinary service more efficiently in my opinion earlier in a disease outbreak than they do in Illinois. They are corn farmers, soybean farmers, and if they lay cattle in from whatever source, the first thing those cattle see is a bunk full of silage. That was the first thing I had to try to get them to not overfeed those calves and get an acidotic situation started. So the preconditioning program that we tried to get going was just to help these guys. We don't have a 1.4 percent death loss in non preconditioned calves. We get like 30 percent death loss. We get some disasters. Now that's probably the worst scenario but I think some of you from Illinois know what I'm talking about. The preconditioned calves, maybe they have to pay as much attention to them. So I think there are regional differences and I think with the computer programs you would have to factor in different death losses and put a number figure on those. So to certain farmer feeders in preconditioned locals I think preconditioned calves are worth more than others. But I think it's a good point. There are going to be regional differences. That's why it's real tough to get a common program throughout the United States. I think you almost have an east of the Mississippi and a west of the Mississippi or something like that.

Panelist: That's my point. I use average figures. They will certainly be within the same region and within our region there will be differences from one side of the road to the other. So therefore you've got to factor that in on what you're doing as far as compared to the average as we know it today versus what you expect to do. So that is certainly an area that you've got to address.

Dr. Hentschl: To answer Dwayne's question, we would automatically process the calves as we have determined is the best processing procedure for that feed yard, regardless of what they received while they were preconditioned. That's standard with us. That's probably happened, and come about by the fact that we haven't had good liaison, knowing what the calves got before we got them. But when we thought we did, we thought we did better if we process them. So that's the procedure in our feed yard. There's no offsetting savings having had it done.

Panelist: The variability in a stocker operation I think in our area would maybe be akin to the variability that you may be seeing in Illinois in the farmer feeder. We have people buy extremely stressed, sick stocker calves that do extremely well with them. We have people, there again, right across the road, that don't do very well at all. We talk about health related performance, there again it's more variable than in a feed yard many times, but basically in a stocker operation you should realize even more gain than I see here in some of these factors, because the feed to gain conversion differences that you may see in preconditioned calves versus non-preconditioned calves

may actually be accentuated to some extent. The average daily gain being a factor would also impact that. So the key there is the fact that I think at least in my practice the stocker operators would be more prone to buy preconditioned calves because they have other things that they're doing instead of being actively involved and have a team of professionals involved on a daily basis concerned with animal health.

Panelist: I think you'll also have the variation of stocker operations, you've got some that buy them during the winter time as light calves, maybe mismanaged calves, and then they put them together and they watch them. They actually put them on feed in winter time or late winter, early spring before the grass comes and more or less precondition them or background themselves and you've got some other people or places that are stocker operations that would like preconditioned calves because if their flesh was right they would go right ahead and grass them. They don't have a feedlot situation with backgrounding a lot where they have them in the winter-time. They would buy them like May 1 and kick them out on the strip mining ground in southern Illinois. There may be an advantage to those people because they don't want to buy a calf that has been processed in the sale barn that is just freshly weaned and kick him out on the grass.

Panelist: I think Dwayne and Curt will agree with me on this. At our sales at home we found, if you remember the 4-weight calves have been thinner than the heavier calves, the heavier the calves get in our sales the fleshier they are. Now what does that tell us? Are these calves poor doing calves and didn't take to the worming? Have you noticed that in the last two years? We've had thinner calves in our 4-weight calves. The 5-weights are fleshier and the 6-weights are even fleshier. I think they maybe tend to gain a little better and do a little better and take up more flesh. We've gone to some grazing programs with our 4-weight calves the past two years and we've got orders this year for some 4-weight calves. Some stout orders so if anybody wants to hop on we're going to roll. But we've got some good orders for some 4-weight calves this year in the preconditioned calf sales. You want to tell a man that your selling them too, hey, these calves are thin, they may need to be wormed again. They look like they maybe didn't take to the worming. But we've gone to some grazing operations with these lighter calves. As I mentioned earlier, I think if this could be done without the flesh it would be more advantageous to the grazer than it would be the feedlot man. But we've got to keep the flesh off of them as well as the feedlot man. I think Arnie and Tim are in areas where they are more commercial. They're dealing with guys that feed thousands of cattle and they have their own staff. They're already hired to be there. They're going to be there whether they get healthy calves or not. So most of our customers will feed from 250 to 3000 a year. Jay mentioned, they buy calves when they are real busy in harvest a lot of the time and they don't have time and admit to us my calves got sick but really I think it was my fault because we didn't see them for two days. So I think that is the difference. We are dealing with different areas and different people and different situations. In these sales the flesh will show up more on your English crosses than they will the exotic crosses. In the Charolais, Simmental, Limousine, Maine-Anjou, exotic crosses, the flesh is going to show up less. With your blacks it's going to show up a whole lot. Your black baldies. The more English the cattle are, the more the flesh there is going to be, I feel. But

I still think, and Arnie and Tim, I would love to hear their opinions on this, I still think if you feed, overfeed, a calf with good genetics, it's going to hurt his gain from that period on I think that is a good point that we have not brought out. I think genetics is definitely important and we are going to have to have that to make the cattle gain. I think that's something that we really haven't brought out today. It is a good point to mention. But I still think we can overfeed a calf with good genetics and hurt his performance from then on.

Dr. Hentschl: If one looks at the preconditioning programs which I didn't put on the overhead and you didn't see in the proceedings, that exist today, the time periods vary. The cattle have to be preowned. I think what happens there, I would agree with Del, as I indicated in my talk, those people will put those calves on in fact a fattening type ration, instead of a growing type ration. That's the key, and so we've got 30 days of finishing on them when in fact if we're starting with a calf to begin with we want to grow them, and we have a guy that's for 30 days fattening them.

Panelist: If we take a look at the pre-weaned calf you look at the average daily gain and the feed conversion and compare that to the control or nonfed calf, basically that's what we're saying, these are fed and no vaccinations. Then you can see that there is an extreme advantage for these control calves. If you do the same comparison on preconditioned calves in this pool of data, part of it relates to animal health, but I can just about tell you that the difference in morbidity on this report isn't going to really impact the average daily gain and the feed conversion. You can see that these vaccinated calves did better. Why? There is one reason that I didn't bring up in my talk and I thought it would probably come up, is that it takes you about 14 days, according to the studies that I read, about 14 to 16 days to regain weight loss at weaning. These studies were done, they were vaccinated and weaned at the same time. The weight loss experienced in these cattle that were vaccinated and weaned was certainly more severe than just weaning alone. They were fed and vaccinated and they did not gain as much while they were on the farm. So part of the reason for the increased performance that we saw in this group versus the pre-weaned group is the fact that our vaccines, as a method for inducing immunity, was somewhat stressful during weaning and they didn't gain as much on the farm. So that shows you the impact. Look at it a little differently than maybe I presented it to you. That relates to your question about genetics but also gives you something else to think about. If you vaccinate those calves they are not going to eat quite as well and gain quite as well on the farm.

Dr. Brown: Just one comment on the genetics. It could be argued all day long, I don't think Dell's ever seen a half-blood key that we've got in Illinois, but you can't feed them enough corn quick enough to keep them under 1,500 pounds. There are some people in Illinois that retained ownership of their own calves that are putting them right on as soon as they can get them off the cow and get them bunk broke and up to a finished ration and then market them at 10, 50, to 1,200 pounds, but these are some maybe half to three quarter exotics, and I don't want to pick on the key, but even the Limousins or Simmentals are almost a half, well, three quarters or higher and those calves, I don't see where they need any roughage at all except to just get them converted over to the feed bunk. I don't know if anybody's got an argument.

Dr. Herb Lloyd: Mr. King, you referred earlier in your discussion, you talked about certifying and you wanted proof of certification or some kind of certification from the veterinar-

ian regarding the cattle. What specifically are you interested in or what do you as a buyer want to have from a veterinarian on a group of calves let's say these calves are CPH calves?

Mr. King: I think a list of the vaccines and when they were done and maybe even the brands of the medicine adds some quality to the certification. As I mentioned earlier, and I'm not against the producer doing it if it's supervised by the veterinarian, I just can't feel the producer can do as good a job as you professionals. I know a lot of times the producers want to do it themselves to save a little money and do it a little cheaper. But if we are going to the trouble to have a classy program, why not do it by the professionals, the people who know what they're doing and how to administer the drugs and so forth. Then have the certification, when it was given, and the types of shots and the brands of the medicine.

From the floor: I have had some problems to a certain extent with our Kentucky program due to the fact that our Kentucky program does allow producers to work their own cattle as long as they buy the medication through a veterinarian. We certify that they picked up x number of doses of x brand of vaccine. But they can also mail-order their vaccine and bring their product by and certify that they did the calves. So what happens is I may be using modified live BVD vaccine in my practice on farm fresh calves. Somebody else may be using a killed product and then these calves get commingled at the auction market during the grading situation so ultimately the buyer, even though he's going to get a certificate that says, yes, these calves have been inoculated against the following diseases, he is going to have a mixed bunch of cattle, some of which got modified live vaccines, some got killed vaccines, and I'm sure everybody in their own practice area are probably prejudiced that there are certain vaccines that, for whatever reason, perform better for you in your given area. So I wish we could see this even standardized more, especially it might even be feasible in our part of the country where we're dealing with about a 5-county area of Kentucky where we veterinarians could get together and basically know what works well in our part of western Kentucky and be sure that all calves coming into the sale have received exactly the same thing. To me, Dell, that would be more important for you to go to that buyer with. We can furnish you with a thousand head of cattle, all of which have been inoculated with the specific product. Then if you received those on the far end up north and know that in your experience in years past x brand of BVD vaccine for whatever reason is not working in your area, you can opt to revaccinate with whatever is effective there. But under our current situation we really cannot pass that information on the buyer.

Dr. Hentschl: My response, Ed, would be that it probably does more good than harm. How much good it does I'm not sure because of the fact that you're doing it for somebody that's already backgrounded those calves and they backgrounded those cattle, we brought them as yearlings off grass. And then we have to recognize the point that I tried to make and maybe didn't emphasize sufficiently, that some of those that fall apart that carry that tag may in fact, be attributed to the manager at the feedlot end rather than your vaccination procedure. So I find no fault with what you are doing and the way you're doing it. I was careful to imply because I assumed you are going to be in the audience and you would see the tag. I've never heard you call that a preconditioning program. What I have done for my cattle feeders though, they think it's a preconditioning program. I tell the cattle

have just been pre-processed. I'm trying to introduce the term that in fact connotes what happened. So we think it helps us. Those cattle we think actually performed better, but because of the management environments that they come into, we are not going to guarantee that they are not going to get sick. I think that's an important problem associated with preconditioning or pre-processing as you are doing.

Mr. King: I've got a loaded question to ask you and Tim when we get off this. I just wanted to address, Tim, in an essential sense they are involved with larger producers. If I called you all as an order buyer, your clients, (I'm addressing this to you all since you are dealing with larger numbers than Jay and I are normally associated with), if I called you all and I had let's say, and I know this is a small number for you all, but let's say 200 head of cattle, and say they weighed 550. And I described these as weaned cattle. And then I called you on 200 head of 550 pound calves, same weight, and described them to you all as preconditioned cattle. Which would you get more excited about? I just wanted your opinion.

Dr. Hentschl: If they both cost the same, I'd probably take the preconditioned calves because I think, I'm talking about me buying them personally, I would say I would probably buy the preconditioned calves because I thought I was getting something free. I guess that's the Scotch in me although I have no Scotch in my blood. Tim do you have a response to that?

Dr. Jordan: I think your answer to the question was very diplomatic and very proper. I would ask Dell one question further. I would say, have these been validated and certified under a preconditioning program that has been authorized by the state association or by AABP? I would be listening to the response to that answer from two standpoints: 1) if there's a yes or no, and 2) if he understands what I'm asking. Because if you understand what I'm asking them you would understand what I'm trying to get at. I would take the preconditioned calves over the weaned calves and I would add another reason in the fact that would tell me, here comes a set of calves from a more intensely managed operation than we routinely get from the state of Kentucky. That could necessarily bring us more economic return than just the weaned calves.

Mr. King: I loaded the question and it backfired on me! They both answered opposite of what I thought they would and let me tell you why. I've had other people that I buy for that would answer it differently. The point I was trying to get across, when I mention preconditioned calves to some people, they think fleshy, fed calves. When I mentioned weaned calves to some people they don't think feed and they think, hey, these are weaned, maybe mismanaged a little bit, going to be thin, we're going to get some compensatory gain even though they have not had their shots, they're going to be thin and weaned, probably going to be pretty healthy and gain good the first month. That is the point I was trying to make when I called it a loaded question. As I mentioned earlier, I feel preconditioning sometimes to you professionals that are involved with a lot of numbers means extra flesh. I am glad to hear that it does not mean that to you all. That's good. I have a few customers that it turns off a little bit if I say preconditioned because they automatically think they are fleshy and they're not going to take off like they should. We have very little opportunity to buy numbers of weaned calves between 500-550. We really like that opportunity when we get a chance to buy them weaned and that light and thin.

Question: The question is for Dr. Jordan, if he bought this set of preconditioned calves, what is he going to get with

them when they get to his feedlot?

Dr. Jordan: They will be processed like local, unstressed cattle rather than problem origin stressed cattle, returning about a \$3 advantage by doing that. If they have already been implanted before, they're going to be implanted again, because that's the only procedure that we do that actually makes us money. So we are going to implant them again regardless.

Dr. Brown: We in Nebraska have dealt with this quite often and we have small lots, larger lots, and so forth. And a lot of the larger custom feeding people will say, we shouldn't have to revaccinate these calves. And I say, I think it's the greatest thing in the world. You can always get a better response out of a booster than you can a single vaccination. We need to think about that in this program. If you prime that pump and then you boost him when he goes into Tim's yard, he's going to be more immune. I think we're going to have to really deal with that.

Dr. Jordan: We can see performance advantages by simply revaccinating local unstressed cattle.

Dr. Brown: That's right. And Al's data would go that way too.

Dr. Jordan: We've repeated Al's data I think to our satisfaction. It's not a problem for me to justify revaccination to any of our clients. So we're going to see an advantage even if they are healthy.

Dr. Brown: You have to think about the amount of exposure. If you're going into a custom yard that handles, say, 10,000 head of cattle a year and you're going into a farmers yard that only handles 300-400 a year, you've got a lot more exposure going into that custom yard. You want to think about that as far as the immunity you're going to produce. The other thing that I'd like to bring up and I thought we've had our program going about 4 or 5 years now and it's gotten smaller instead of larger, economic conditions haven't been good, but one of the things that I thought we could do was generate data so we could show whether it was good or not. We have a ranch that belongs to the university. We wean about 750 calves. We put them on a program for 3 years. We do everything to match the market situation. We haul part of the calves, we bunk part of the calves within different feedlots within the university. We looked at all this and saw no difference after 3 years. The data stayed the same. We quit the fourth year and got the biggest break you ever saw and lost a whole bunch of calves. One of the problems you have with shipping fever is what triggers that and what year is going to be that bad year. I don't think you're ever going to see a lot of real positive data to pick out that situation. I do a lot of consulting over the state. You walk into a man's yard that has 500 calves and he's lost 10 percent of them, 30 percent chronics, I don't have anything in my bag that is going to help him. I can tell him, well next time you'd better watch what you buy. I think that is a part of selling this program. The difference is out there to the industry, but we can't demonstrate it research-wise either, I don't think.

Dr. Jordan: There again we've got to have that model so we can know.

Dr. Brown: That's right. This is one of the things. It's a real pain. I worked with animal scientists, you know, and so they look at all this data and they say that program is no good. They tell their producers that. I don't think they understand these situations. It's a good program, overall. It's got more holes in it but there's a lot of good things there. We have no vaccine that's any good, really. The last 30 years our vaccine hasn't changed the respiratory problem very much.

But if we can put this thing in a package, and the main thing we're doing is reducing that stress and getting that calf to eat, we'll save his life.

Mr. King: I'm like the producer, I guess. I'm a little confused about preconditioning. I think Tim brought out in his data that he is preconditioning when those calves were vaccinated and weaned at the same time, and you end up with weight loss during the first two weeks because these calves are stressed. My idea of preconditioning is that you vaccinate them three weeks before weaning so that you get out of that stressful period. Have I misinterpreted your graph?

Dr. Jordan: In the data I presented, they were weaned and vaccinated at the same time.

Mr. King: So the data doesn't look too good for preconditioning.

Dr. Jordan: The data does look pretty good but the premium on today's economic basis is only \$1.33 per hundred weight on a 550 pound animal. That's \$7.00. Can you precondition a calf for \$7.00? Can a cow-calf producer, calf producer, precondition a calf for \$7.00? Now, there are some other factors involved there that I'm not sure we all understand as far as weight gain, what weight gains are going to be, death loss on the farm, the medicine costs on the farm, and some of these things that I didn't bring up. All I did was say, from a feed yard standpoint they are worth \$1.33 per cwt premium on today's market.

Mr. King: Has there been any work done on what my beliefs in preconditioning are, you actually pull these calves off the cow and process them, put them back on the cow for 3 weeks and then wean them.

Dr. Jordan: We've done a little bit of work and I didn't present it because I don't think there is really enough data to evaluate where we've done basically what you've talked about. Also we have not weaned them at all and just weaned them on the truck to the feed yard but they had been vaccinated. Either one of those programs has had significant economic returns by doing that, so I would personally tend to agree with you. But until I get enough data to make a point, all I can tell you is it looks pretty good. So all you're doing is taking my opinion again. I want to present some data that is pretty well controlled.

Question: So the preconditioning program in the U.S., which I am not real familiar with being from Ontario, is that usual that your preconditioned calves are weaned and processed at the same time?

Panelist: I would make one comment. Dr. Bob Bohlender has done some, and Dr. Mackey, I think, has done some work where they've actually vaccinated these calves along that line where they've vaccinated them before weaning. A concept that I learned from working out in western Nebraska was not weaning the calf but weaning the cow. And that's putting the cow and the calf in the dry lot situation when they come off grass and filling up the bunk with hay or solids or something. And the calves, I don't know how they can lose weight when you wean the cow away. The calf stays right in that lot and you just turn the cows back out, if they have been pre-weaned and vaccinated. Now I don't know many details, but Bob Bohlender has done some and reported to me when he gets a second implant or reimplantation and does some parasite control even 30 days ahead of weaning time or more, and then has this concept of weaning the cow more than the calf, I think you see some dramatic results and I hope we don't get them too fleshy but I think that is where we don't even need a premium price. We'll get a premium price on the total package of the calf. But probably in every state and every feedlot it's not

going to work.

Dr. Hentschl: Just a response to the gentleman from Ontario, the Pritchard study indicates, and there is a reference to that in the Proceedings when you get it, the Pritchard was over two years and involved four ranchers. He vaccinated on the cows. These calves were vaccinated and turned back on the cows for two weeks and then the calves that were weaned were weaned at 28 days, so that was a 42-day kind of a thing. The concern that arises, at least I read it, I don't do any cow and calf work so I don't really know, but the concern that arises is, what about using modified live virus vaccines on calves when they are sucking their dams? I think that's debatable but that certainly is a concern some cow-calf people have indicated to me as I visited with cow-calf raisers.

Question: Are not the milk fat calves coming off the high milk producing cow, not also discounted on a same equal basis as opposed to the fat calves that have been on feed?

Mr. King: That's a good question and a good point. We try to stay away from the calves that have come off milking mamas. We buy a lot of calves out of graded sales in Tennessee, in the mountain areas where the calves are generally thinner are showing that ring on their tail from that extra milk. And we try to dodge away. We do discount or just try not to buy. We don't have many customers that really want the real milk fat calves. But, yes, he would be discounted if he was fleshy enough off of that milk. I feel probably most of our grazers would tell us they would rather have that calf off that cow carrying that milk fat than excessive grain fat. I think most of them have the idea that if the calves have had grain and then go on to grass it hurts their gain somewhat more than it would the milk fat. Of course they don't want fleshy calves either way, they tell us. But I feel if they could have a preconditioned calf that wasn't real fleshy, then they would be real pleased, as far as the grazing operation would go.

From the floor: I'm hearing a lot of truisms coming out this afternoon. I haven't been in practice for several years but I'm proud to report my level of ignorance has not deteriorated a bit! What I'm hearing is that maybe what we need in a seminar or presentation of this type is a better understanding of how each of us can look at the economics of our cattle management and our animal health, our herd health management practices in our areas or our regions of our weights of calves, Well. I think what I heard you just say was the cattle industry still has an ability to make money from the mismanagement of the disadvantaged calves of others. That hasn't changed in quite a few years. My file on preconditioning is 15 years old. We reached a lack of conclusion here today about like we reached in San Antonio on whether we vaccinate for BVD or don't. The points are excellent, Tim, and I like your numbers. But we're struggling with a situation that says, depending on what kind of cattle you're dealing with, what region of the country it is, and what your feed source is, preconditioning may or may not pay, if we understand what we're calling preconditioning. And I think it comes down to the numbers again. The economics is what we've got to lay on the table this afternoon and walk away with an understanding of it. We can all push the buttons, but we may not have the understanding on how to go through those buttons. Tim did an excellent job for the high plains of Texas. I didn't hear some of the other presentations but I'm sure they hit those points, too. I challenge each of us, I happen to live in the Midwest now and I can tell you the economics there are different than what they were in north Mississippi for preconditioned or pre-weaned or pre-conditioned calves. I suspect that's the case across the country.

Mr. King: I think that's a good point. However, you know I mentioned that we like to buy cattle for our customers from mismanaged herds. The economic situation in the farm population is pretty rough right now. Rougher than I thought I'd ever seen it. A man weaning a 400-500 pound calf today, is not going to be around many more years, in my opinion. We like to buy them. I bought some heifers this week that weighed 637 and born during the latter part of March this year. He's going to be around awhile. I realize that a fat animal, a fat calf, weighing 650 pounds, we don't have a good market for it. I think even there preconditioning is even more important when we have a fat calf weighing 650 he definitely needs to be weaned. Now we discount the file of those things through the sales if they are fat. If they are yearling weight cattle, 650-700 pounds off the cow, and send them to Arnie and Tim they would probably send them back to us, because they want a yearling, a weaned animal at that size. That's the way I feel about it. But I think your point is very good. It depends on whether you're looking from the buyer's or the sellers standpoint

Question: I came in here today thinking that Dell King was unique and I'm about to feel I'm unique because very few of you people have said anything about, where is this order buyer going to come from that cares. In other words, what I'm saying is, do many order buyers care about the health, coming or going, about the cattle as long as they shuffle them through and get the percentage?

Mr. King: Since we started 18 years ago health has really concerned me. Just like we mentioned earlier, if we've got the reputation, and we do have a reputation of sending healthy cattle, we do have occasional people that do have problems with the cattle, whether it's their problem or whether we've got hold of a bum set of cattle from them, I and my people honestly care about the health. That's the reason we don't buy many put together cattle out of the sale. And I'll say this today, and I firmly believe this, the question we're debating, is preconditioning doomed? I think if there's not a stand and if something does not come out of this meeting today, we may not have preconditioning in a few years. I think it's teetering right now, fellows, I really believe that. If somebody doesn't stand up and do something and make positive steps and get preconditioning done right, I think we're sure losing ground.

Panelist: I told the fellows a few years ago when they were trying to promote DHIA and get the dairymen to do a better job, don't send the DHIA report to the county agent, send it to the milk truck driver and the banker. Those two men were interested in what that man produced because it has to do with their incomes. Now if you want to promote preconditioning I think we need to forget about promoting it, we need to talk it and educate it, but don't expect the veterinarian to promote it or the extension people to promote it, but get Dell King and his people and the bankers. Another good example of that, a very good friend of mine was an order buyer in central Kentucky, also in the purebred seedstock production business, can sell bulls all day long much easier than I can because he's an order buyer and he's got that man's attention. But we want to promote preconditioning. I think we need to go and talk with the order buyers because they have the seller's attention much more than we do. I think yes, the extension people and us can do a real job of education, but to really get their attention, I think those people can do it, the banker and the order buyer.

Panelist: I don't think you're going to find too many order buyers in this part of the country that are going to be for

preconditioning. What about it, Ed? I'm not condemning anybody and not saying why they're against it. I think why they're against it is because it's not being done properly. The flesh and the things we've talked about here today. I feel when we as an order buyer, or a buyer, when I'm in the country buying cattle, they may think I'm asking them to do something that will benefit me. Well I am. It will benefit me and it will benefit them. It will benefit the whole industry, particularly when we are dealing with the southeast when we really have a bad reputation of having sick cattle and short cattle. Preconditioning is not going to help the short end of it, but it will sure help the health of it if it is done properly. And as I mentioned earlier, this feeding thing, this fleshing, you've got two guys here that handle lots of cattle and both of them and Jay will agree that the flesh is one of the big problems that we've got today. I've been hollering since we've been going at Hopkinsville and we've been doing better. They're thinner at Hopkinsville, but not as thin as at Jamestown, Tennessee. But we're making some progress but we've still got more progress to make. I don't know what will happen with this cheap corn for next year.

Dr. John Simmons: It was real interesting to me, one of the things we've got to do is integrate interests around here. I see the order buyer's standpoint. He's going to pay premium prices for the cattle that his clients want. And he's got to be a pretty good boy if he's got to survive, because when he delivers up what they don't want, then he has to find another profession, just like only a veterinarian who doesn't deliver up today a \$1.10 to the \$1.00 he takes, he must find a profession, too. The thing I'm seeing here is one point that Dr. Brown made. One kind of cattle need to be marketed one way and there's a market for them. Another kind another way. You get those continental crossbred cattle, they belong straight to the feedlot. Those 600 pound calves have no business around eating silage. They need to get on 90 percent corn just as fast as they can get. Those of you that were out there at the fair last night, that littlest one weighed 1240 and he's a baby, but he's ready to go. He has no business on silage. On the other hand you've got range conditions where that old cow's got to walk from me to you to find a mouthfull of grass. You can't have a 1500 pound cow doing that. You need a 1000 pound cow and she's going to wean a calf that weighs less than 400. Now the question is, should I get him butterball fat? No, because Dell doesn't want him. That's the cheap gain. But Dell made the point real well a minute ago, I thought, that this guy has to look at his ranch and see what it will produce most efficiently and market those cattle that way and they have to be marketed 17 different ways. This is a real interesting discussion. I think the best one I've heard. I congratulate all of you.

Dr. Hentschl: I'd like to respond to John. Basically that's what we have to do with fats in Michigan. Our market will not really support the continental breeds but they do support them in Ontario. So we send them over there and it makes all the difference in the world. So it's a matter of knowing where you're going to market your product.

Panelist: If we're dead there's not going to be an AABP. It's that simple. If that happens, there's not going to be an AABP. To begin with, the consumer won't consume that animal.

From the floor: I've listened to a lot of these conversations and discussions over the years and I'm always interested to know that whenever feed's cheap we like light cattle and whenever feed's high we like to have heavy cattle. I think we need to watch the conditions a little bit. It's real nice and it

depends on whether you're buying or selling. I'm really concerned about 10 people making a living off the same group of cattle. That's another problem we have today when we added backgrounding into it. Now we need another group of order buyers, another group of people, another group of feeders, and things to make money. So I think that's a concern.

But my real concern here is maybe we're trying to fit a program to a need. Is it preconditioning or whatever we wish to call it, maybe we should redefine the need that you need in the feedlot or in backgrounding or buying cattle. What do you need and then let's start from there. Let's not try to make the program fit the need.

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