



SOY BEST®
All Natural Since 1958



GLUCO BEST®
The Protected Glucose®

Cattle Ridge

Gluco Best feeding trial



Experimental design



- Pens and lots
 - A total of 568 steers in three lots
 - Each lot was divided in 2 pens and assigned to control and treatment.
- Duration
 - The trial duration was 92 days
 - The feeding paired pens ranged from 46 to 57 days, with each lot commencing on different dates.
- Weather data
 - THI index was recorded using the data from Tekamah weather station (<https://www.weather.gov/wrh/timeseries?site=KTQE>).
- Data collection
 - Cattle Ridge computer: Dry matter intake, estimated weights, mortality, Lot close outs (Eric).
 - Cargill: Hot Carcasas Weight, Back fat, Rib eye area and marbling score.
 - Cattle panting score measured by Michael



Cattle description



Lot	Pen	Diet	Heads	Starting date	Finishing date	Estimated Weight at the start (lbs)	Weight at slaughter house (lbs)	Days on trial
370	PEN 50	Control	104	06-12	08-08	1340	1429	57
	PEN 51	Glucobest	103			1340	1410	
390	BARN 55	Control	71	07-10	08-25	1323	1462	46
	BARN 53	Glucobest	75			1323	1461	
384	PEN 29	Control	118	07-18	09-10	1345	1492	54
	PEN 20	Glucobest	116			1345	1509	



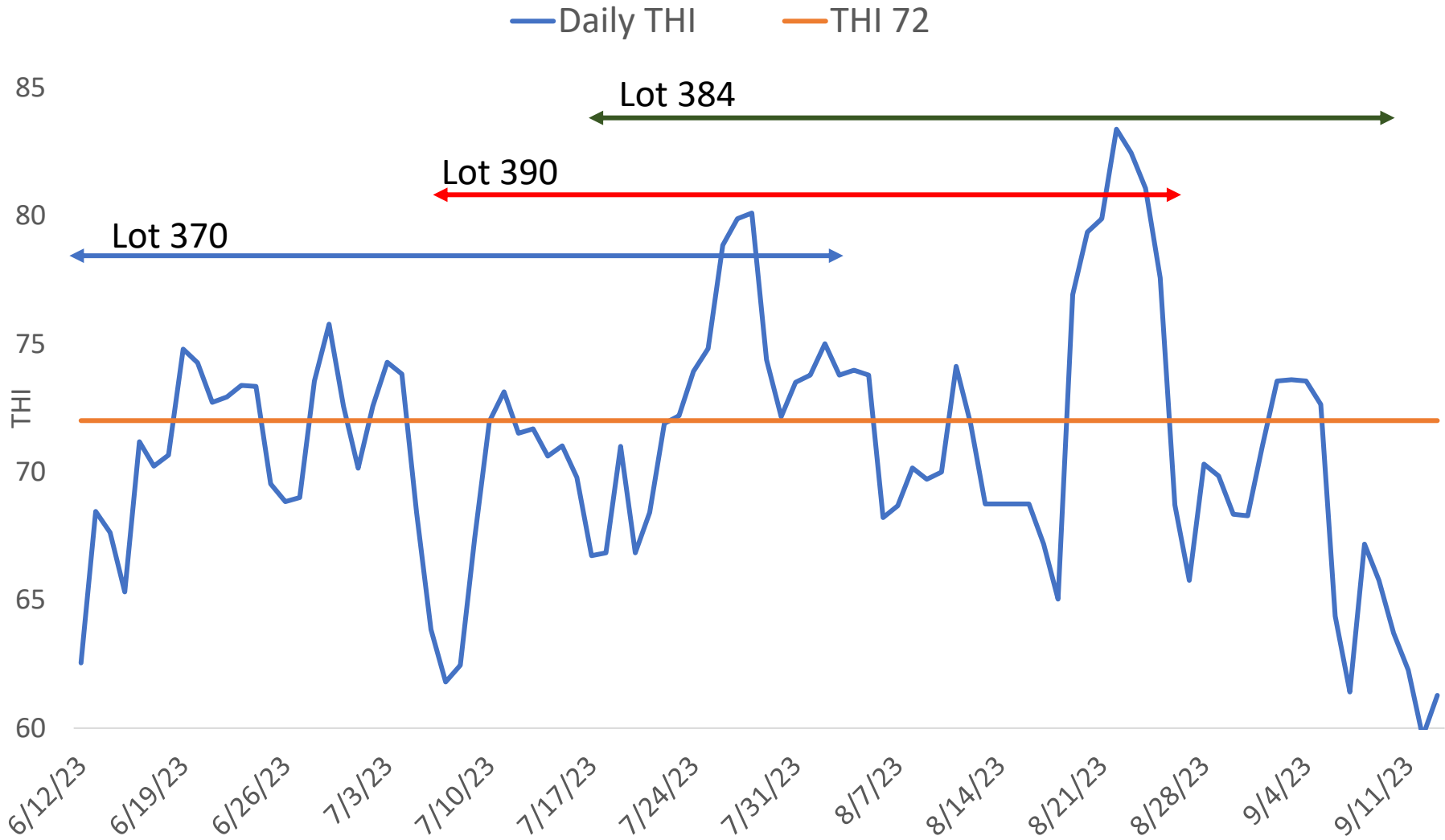
Pens and THI



Pen	Total Period	Lot 370	Lot 390	Lot 384
Total Days, d	94	57	46	54
Avrg THI	71	71.2	71.3	72.3
Days over 72THI, d	40	28	28	26
Heat stress, %	43%	49%	61%	48%



THI index (Tekamah Station)





Results



	Control	Gluco Best	SEM	P value
Dry matter Intake, Lb/d	24.51	24.15	0.27	0.34
Hot Carcasas Weight, Lb	945.83	960.81	4.56	<0.02
Back Fat, inch	0.68	0.71	0.01	<0.10
Rib Eye Area, inch ²	13.87	13.83	0.1	NS
Marbling score	521.21	534.43	7.11	NS



Results Meat Quality



	Control	Gluco Best
Prime, %	7.3	12.4
CA-Choice, %	34.3	36.5
Choice , %	45.5	40.1
Select , %	11.9	10.6
Drk Cut , %	0.3	0.0
No Roll , %	0.3	0.4
Hard Bone, %	0.3	0.0
	100	100

Cattle Panting score (July 30)

Score	Control	Gluco Best
0	0	2
1	22	30
2	39	53
3	30	14
4	9	2
Average	2.26	1.84

Figure 2: Panting Scores

<u>Score</u>	<u>Description</u>
0	Normal respiration
1	Elevated respiration
2	Moderate panting and/or presence of drool or small amount of saliva
3	Heavy open-mouthed panting; saliva usually present
4	Severe open-mouthed panting accompanied by protruding tongue and excessive salivation; usually with neck extended forward

<https://beef.unl.edu/beefwatch/heat-stress-handling-cattle-through-high-heat-humidity-indexes>

Mortality

	Control	Gluco Best
Animals, N	286	282
Heat Stress Deaths	8	0
% Total	2.8	



Close outs

Cattle Ridge



Lot 370



Lot	Lot 370		
	Gluco Best	Control	Difference
Close up			
Pen	51	50	
Initial Body Weight, Lb	1340	1340	0
Final Body Weight, Lb	1410	1429	-19
Hot Yield	65.39	64.35	1.04
Choice	90.29%	83.17%	7.12%
Avg dressed weight Lb	922	920	2
Animals sold	103	101	2
Price per head \$/hd	2777	2736	41.11



Lot 390



Lot	Lot 390		
Close up	Gluco Best	Control	Difference
Pen	53	55	
Initial Body Weight, Lb	1323	1323	0
Final Body Weight, Lb	1461	1462	-1
Hot Yield	65.79	64.20	1.59
Choice	82.89%	86.76%	-3.87%
Avg dressed weight Lb	961	939	22
Animals sold	70	68	2
Price per head \$/hd	2805.7	2763	42.89



Lot 384



Lot	Lot 384		
Close up	Gluco Best	Control	Difference
Pen	29	20	
Initial Body Weight, Lb	1345	1345	0
Final Body Weight, Lb	1506	1492	14
Hot Yield	66.33	65.95	0.38
Choice	91.74%	90.60%	1.14%
Avg dressed weight Lb	999	979	20
Animals sold	109	117	
Price per head \$/hd	2951.05	2891	59.86

Average ROI

Lot			
Close up	Gluco Best	Control	Difference
Pen			
Initial Body Weight, Lb	1336	1336	
Final Body Weight, Lb	1459	1461	-2
Hot Yield	65.84%	64.83%	1.00
Choice	88.31%	86.84%	1.46%
Avg dressed weight Lb	960.67	946.0	14.67
Animals sold	282	286	
Price per head \$/hd	2844.58	2796.63	
Total Cost, \$/hd	2403	2403	
GM, \$/Hd	441.72	393.76	47.95
Days with GB, d	52		
Treatment 75C day	39.25		
Feed replaced @0.12c day	10.68		
Cost of treatment	28.57		
Total	413.14	393.76	19.38
ROI	1.50		
Mortality, hd		8	

Calculation of the influence of deaths in the trial

	Gluco Best	Control
Heads fattened, Hd	1	1
Mortality. Hd		2.8%
Heads Slughtered	1.00	0.97
Income, \$/Hd	2844.58	2796.63
Income accounting for mirtality, \$/Hd	2844.58	2718.32
Average Costs	2431	2403
Total GM. \$/Hd	413	315
Differnce Mortality		98
ROI		4.10



Conclusion



- THI on average for the 94 days period was 71
- Animals In lot 384 had the most days over 72 THI 61%
- Feeding Gluco Best increased significantly hot carcass weight and increased numerically back fat thickness
- Feeding Gluco Best increased meat quality
- On average GB improved in \$47.95 the income and the investment was of \$28.5 yielding a \$19.38 increase in Gross profit per animal
- ROI ranged from 2 to 1.35 averaging 1.5
- Gluco Best fed cattle dd not have mortality