



# NUTRITION NOTES

Innovation + Research from Kent Nutrition Group

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## ECONOMICS OF CATTLE MARKET WEIGHTS DEPENDS ON COST OF GAIN AND SALE PRICE

*Randy Rosenboom, Commercial Account Manager*

I get many questions regarding the cost of gain and the ideal market weight to sell cattle. There is no ONE right answer for all time. It is a moving target and depends on feed and total cost of gain as well as market price for the fed cattle.

When corn was \$7/bushel and fat cattle were \$125, it was a no brainer. The cost of gain for the final 100-200 pounds was much higher than the actual sale price of the cattle. So you were spending \$175 to get \$125 for the last 100 pounds.

However, today's feed costs are much lower and the sale price is approximately the same as when corn was \$7. So, when I'm asked why producers are feeding cattle so heavy, the answer is that the market is telling them to. While it may not be good for the cash cattle price to feed cattle to 1600 or 1700 pounds, when the cost to put on another 100 pounds is still under the fat cattle price, that is what's going to happen.

Below are two tables that show the cost of putting on an additional 100 or 200 pounds of gain over a traditional market weight of 1400 pounds. The futures price for the month these cattle finish is about \$112-113/cwt. So when we look at the additional cost to put on 100 pounds more gain, if it is lower than \$112, the cattle are probably going to get heavier.

### Cost of gain for feeding cattle to 1400, 1500 or 1600 pounds with \$3.50 Corn:

Weight range, lb	750-1400	750-1500	750-1600
Starting Weight, lb	750	750	750
Finishing Weight, lb	1400	1500	1600
ADG, lb	3.50	3.35	3.20
F/G	658	686	719
Cost/cwt gain, \$	\$68.05	\$70.41	\$73.56
Extra cost/hd, \$	-	\$86.01	\$181.78
Extra cost/cwt gain, \$	-	\$86.01	\$90.89

So you can see, as long as the fat cattle price is more than \$90/cwt, producers are going to try to keep feeding and put more weight on. This example is for beef steers and generated on Dalex. While the actual real world performance and costs and performance may not be exact for your area, the relative differences are probably pretty accurate. The same comparison could be done for Holsteins either with Dalex or using the PDB projection program.

*continued*



## NUTRITION NOTES (continued)

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Below is the same example as above, but using \$4.50 corn instead of \$3.50 just to illustrate the magnitude of changes on cost of gain. Note that the first 100 pounds increased the cost of gain about 25% and the second 100 pounds increased the cost of gain about 35% over the 1400 pounds finished weight.

### Cost of gain for feeding cattle to 1400, 1500 or 1600 pounds with \$4.50 Corn:

Weight range, lb	750-1400	750-1500	750-1600
Starting Weight, lb	750	750	750
Finishing Weight, lb	1400	1500	1600
ADG, lb	3.50	3.35	3.20
F/G	658	686	719
Cost/cwt gain, \$	\$75.03	\$77.76	\$81.13
Extra cost/hd, \$	-	\$95.92	\$202.63
Extra cost/cwt gain, \$	-	\$95.92	\$101.32

So as you can see, a \$1.00/ bushel increase in corn price, causes about a \$10/cwt increase in the extra cost/cwt gain. As I said, this is a moving target and may need to be evaluated for each situation.