



Managing Feedlot Heifers to Optimize Performance

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Feeding heifers Vs steers presents the obvious complicating factor of estrous. The “fix” to this problem is generally assumed to be: incorporate melengestrol acetate (MGA) into the heifer rations and all will be well

The solution is not that simple:

- 1) dry matter intake must be consistent to maintain the proper dose of MGA daily. Liquid supplements will help maintain consistent additive delivery and intakes.
- 2) heifers receiving MGA will out perform those that are not.
- 3) heifers fed MGA can still show estrous behavior while having improved feedlot performance.
- 4) factors contributing to intake variation, including weather, will tend to contribute to less effective heat suppression overall.

Feeding MGA to heifers is intended to control or suppress estrous behavior. The actual claim is “increased rate of weight gain, improved feed efficiency and suppression of estrus in heifers fed in confinement for slaughter.” The key to MGA effectiveness is to get adequate MGA dose in each heifer every day she is in the feedlot.

The approved daily dose for MGA* in liquid supplements is 0.25 to 0.50 milligrams (mg) per head whether fed alone or in combination with Bovatec®, Tylan®, or Rumensin® & Tylan. The combination of MGA and Rumensin has a dose range of 0.25 to 0.40 mg MGA per head. Most MGA is fed at close to the maximum approved level. MGA is a synthetic progesterone type compound making a heifer’s system ‘think’ it is pregnant. Thus, she will not cycle. However, if the 0.4 or 0.5 mg of MGA doesn’t get into her daily, signs of estrous (standing heat) will be shown within two to five days.

Anything that shorts a heifer’s MGA daily dose will lead

to riding and lost performance. A snowball effect can occur when riding starts in a pen. Those heifers doing the riding will not be eating and will be expending extra energy in the wrong direction. Consequently, their dose of MGA gets missed and they are being ridden, too! And, it can take several days to weeks to quiet them down and back on feed. Heat, humidity, lack of water (both quantity and quality), changing weather, new cattle, working the heifers, changing feedstuffs, moldy or out of condition feed, can all disrupt dry matter intake and MGA dose. Lack of bunk space, ration sorting, mixed weights of heifers in the same pen, and poor feed mixing & distribution can also contribute to a fluctuating MGA dosage.

University and industry studies have shown Liquid Supplements distribute dietary additives more effectively resulting in enhanced performance. QLF manufactures supplements using a MGA liquid premix that will not separate out. Less sorting and improved dry matter intakes have been consistently observed with QLF liquid supplements. Dry rations that include liquid supplements at 1 – 2 lbs. have fewer fines, improve ration acceptance and decrease ruminal upsets.

To understand MGA’s performance characteristics, data from nine controlled studies done in 1990 are reviewed below.

- ✓ MGA was fed at 0.5 mg per head daily; tylosin at 90 mg and monensin at about 330 mg per head daily.
- ✓ Over 50% of the heifers not getting MGA showed estrous behavior, about 14% of the heifers receiving 0.5 mg of MGA were in standing heat.

What was the performance by treatment?

- ✓ Rates of gain and feed conversion were similar with MGA alone or in combination with Tylan.
- ✓ Heifers receiving Tylan alone had reduced performance with less liver abscesses compared with those heifers only receiving MGA.
- ✓ Heifers not receiving Tylan had almost 25% of their livers being abscessed and probably condemned.

State	TREATMENTS			
	H	T	HT	HRT
OK	8	42	8	0
MTP	17	46	17	21
MT ^b	17	81	17	14
TX	26	31	26	19
WA	8	63	8	0
Ave	15.2	52.3	15.2	10.7
H = MGA; T = Tylan; HT = MGA + Tylan				
HRT = MGA + Rumensin + Tylan				
MTP - Huntley MT ^b - Bozeman				

Item	TREATMENTS			
	H	T	HT	HRT
DMI	23.0	21.9	22.6	21.6
ADG	2.88	2.64	2.84	2.87
F/G	7.99	8.30	7.97	7.52
Liver Abscesses	24.76	15.51	16.19	16.13
H = MGA; T = Tylan; HT = MGA + Tylan				
HRT = MGA + Rumensin + Tylan				

- ✓ The three-way combination of MGA, Rumensin and Tylan was the best program for performance and liver abscess control. But, as seen in the first table, you can still have from 8, to as many as 26 heifers showing estrus out of 100 even when feeding 0.5 mg of MGA per heifer daily.

Healthy animals, properly balanced rations, the right QLF Liquid Supplement, consistent feed intake, good bunk management and attention

to detail will pay dividends for you and your customers!

*FOI Summary - www.fda.gov/cvm/FOI/foidocs.htm
(FDA, NADA 138-792/138-870)

