Are you leaving money on the table with your calf-hood implant program?

*Take the necessary steps to maximize your return on investment*

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There are very few (if any) growth-promoting technologies that offer as much of a return on investment as an implant does. While the feedyard and backgrounding sectors of the beef industry continue to embrace this technology, its use in the cow/calf sector has waned over time. Even when put to use by cow/calf operations, an implant program’s return on investment can be limited by the means in which this technology is used.

To use calf-hood implants as effectively as possible, it is important to first understand how they work. In a nutshell, implants consist of one or more pellets that contain a certain level of one (single) or two (combination) steroid hormones. Implants are designed to slowly release a certain amount of hormone into the animal’s circulation over an extended period of time. The amount released into circulation depends upon the implant’s potency (level of hormone contained in the implant) and its duration of release. At a certain level, the additional hormone(s) provided by the implant alter(s) growth. Once the implant no longer emits the amount of hormone necessary to do so – or once the implant pays out – it provides no additional benefit.

Implants increase growth performance through increasing feed efficiency and feed intake. Just like a fire can be smothered by limiting its oxygen supply, an animal’s performance response to an implant can be limited by its nutrient supply. If the animal isn’t provided with enough nutrients to support the additional growth, the growth response is limited. That doesn’t mean that the implant isn’t doing what it’s supposed to do, but rather that the magnitude of change in growth performance that can be attributed to the implant can be limited by the animal’s plane of nutrition. If you generally wean heavy calves that are gaining steadily at the time of weaning, expect a pre-weaning calf-hood implant program administered at the appropriate time to net a double-digit increase in pounds at marketing. If you generally wean lightweight calves that are gaining slowly at the time of weaning, expect that yield to be considerably less.

As simple as it may sound, one of the most important pieces of advice that I have to offer in regard to calf-hood implants is to always read the label. Become familiar with your implant options before determining what implant or combination of implants you should employ on your operation. Your implant program may not necessarily look the same from one year to the next, and that’s okay if changing situations or management strategies call for changes or adjustments to your implant program. Above all, the program needs to be logistically feasible for your operation.
Keep in mind that not all implants are approved for use in suckling calves, and that some implants can only be administered to cattle that meet certain age or weight criteria. Some implants are only approved for steers or heifers, while others are approved for both. Be mindful of whether or not you intend to retain or market heifer calves as replacement females.

Replacement heifers should NEVER be implanted as calves unless that specific implant is approved for use in replacement heifers. Even then, there is likely little to no value in implanting replacements. Weaned (or older) replacement heifers should NEVER be implanted with any type of growth-promoting hormone implant. The potential risk of altering normal reproductive development far outweighs any added growth performance from the implant, and for that reason, it is recommended to forgo implanting replacement heifers altogether. Similarly, NEVER implant bulls that will be retained or developed for breeding purposes, regardless of their age. Any heifer or bull that received an implant and will be marketed should be sold under a designation that identifies the cattle as having previously been implanted.

Implants are only effective when administered properly. While the implanting process is quite simple, take care to ensure that improper techniques don’t unintentionally limit implant efficacy. Take time to ensure that the site of administration is relatively clean, and that the implant needle is also cleaned and disinfected before its first use, and between each animal thereafter. This will help to prevent infection at the site of administration, and decrease the risk of transfer of blood-borne diseases between animals. A plastic container with a sponge that is soaked in diluted disinfectant can be worth its weight in gold on implant day. Be sure to administer the implant subcutaneously, and avoid imbedding the implant in the cartilage of the ear or crushing the implant during deployment. Intact implants can be easily felt beneath the skin. If you can’t feel the implant, something went wrong. Improper administration will generally reduce implant efficacy, if not render it completely ineffective.

When designing an implant program, do not underestimate the importance of implant duration. Once the implant pays out, it stops working, and cattle will generally begin to compensate. When this happens, the benefit of the implant begins to decline over time. In other words, return on investment decreases as the duration of time beyond payout increases (without re-implantation). In this scenario, the benefit may not completely go away, but its magnitude may be far less than anticipated. For this reason, it is important consider anticipated marketing dates when designing and scheduling implant programs.

If the implant program consists of only a single 100-day implant, cattle should be marketed somewhere between 70 and 100 days following administration of the implant. This requires the implant to be administered 70 to 100 days prior to the date in which cattle will be marketed. On the flip-side, if that same implant goes in at 1 to 2 months of age, it will pay out long before the cattle are marketed. In that scenario, consider re-implanting after 70 to 100 days following administration of the initial implant. In an ideal situation where time and labor allow, schedule the initial 100-day implant to be administered 140 to 180 days prior to marketing, and the second implant (re-implant) to be administered 70 to 90 days prior to marketing. Alternatively, or if
time and labor will not allow you to re-implant, consider a longer-duration implant that is administered at a time where payout coincides with marketing of the cattle.

While these are only a few of the major factors that contribute to success of a calf-hood implant program, a number of other resources are available that can help you to maximize return on an implant investment. Take the time necessary on the front-end to ensure that your calf-hood implant program isn’t leaving money on the table, and that your investment doesn’t turn into an expense.