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Oklahoma Cooperative Extension Service • Division of Agricultural Sciences and Natural Resources

Growth Implants for Your Club Steer

What Is an Implant?

Implants are compressed pellets or small cylinders containing specific compounds that are placed under the skin of the ear. An implant helps your steer gain faster. It also helps your calf convert feed into beef more efficiently. Products that work this way are referred to as "growth stimulants." Because these products are inserted under the skin, they are commonly called "implants." The back of the ear is the location for implanting these products.

Implants are designed so that the growth stimulant is released very slowly into the blood circulation system. Once given to the calf, the implant improves performance for approximately three to seven months. The actual length of time depends on the brand of implant used. On the average, implants make your steer gain 10 to 15 percent faster. Your steer will also need 8 to 12 percent less feed when implanted with a growth stimulant. The actual results vary. Calves getting good nutrition and management respond best to implanting.

Implants Available for Steers

Eight brands of implants are available for use in steers: they are Compudose, Finaplix-S, Implus-C (Calf-oid), Implus-S (Steer-aid), Ralgro, Revalor-S, Synovex-C, and Synovex-S. The brands vary in the kinds and/or amounts of active ingredients and the live animal weight at which they should be administered. None of these products have a withdrawal time prior to slaughter.

Compudose is a small cylinder of silicone rubber that is coated with a female hormone called "estradiol." It can be used in any age steer. This implant is effective for up to approximately 200 days.

Finaplix-S contains trenbolone acetate and is designed for use in feedlot steers weighing more than 600 pounds. It is effective for approximately 100 days.

Implus-C (Calfoid) is to be used with calves over 45 days of age and weighing less than 400 pounds. It contains estradiol benzoate and progesterone.

Implus-S (Steeroid) is for use in steers weighing more than 400 pounds. The active compounds are estradiol benzoate and progesterone. The implant is effective for approximately 100 days.

Ralgro is a small pellet that contains zeranol. This causes the calf to produce more growth hormone, which results in faster growth. Ralgro may be used in any age steer. This implant is effective for 90 to 100 days.

Revalor-S is for use in feedlot steers, and it contains trenbolone acetate and estradiol. The implant is effective for approximately 100 days.

Synovex-C can be used with a suckling steer calf after 45 days of age and up to 400 pounds.

Synovex-S is to be used with steers weighing more than 400 pounds. The implant contains estradiol benzoate and progesterone, and it is effective for approximately 100 days.

Feeding trials have been conducted throughout the country to determine the effectiveness of these implants. When used properly and according to label instructions, these products produce similar performance results and wholesome meat.

How to Implant

The implanting technique is fairly simple, but it must be done properly to get the best results. An implant should be put underneath the skin on the back side of the ear.


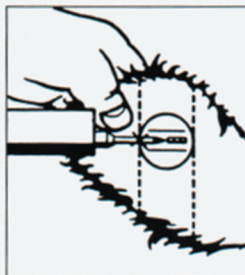
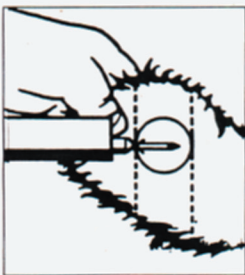

You must be careful to avoid cartilage, large blood vessels, ear tags, and crushing the pellets. Do not tattoo the calf where the implant is located. Improper implanting causes unwanted side effects. These side effects include bulling, rectal prolapse, and raised tailheads.

The implant is inserted with an implanting device. Each brand uses a different device, but the devices are similar in mode of action. You may need help the first time you implant, but you should find the technique to be easy after that. Specific instructions on how to implant vary slightly, depending on the brand used. All of the implant products discussed are deposited under the skin in the center $\frac{1}{3}$ of the ear.

To properly implant and to avoid injury, the steer must be confined in a restraint mechanism (squeeze chute or head gate). In order to prevent infection, follow the manufacturer's suggestions on the use of germicidal solutions in preparing the ear and disinfecting needles. Start with the needle parallel to the ear. Push the needle point under the skin and then slide the entire length of the needle under the skin. The needle should be between the skin and the cartilage of ear. Do not puncture the cartilage and be sure to avoid the ribs of the ear. Withdraw the needle a distance about equal to the length of the implant. This space will prevent the crushing of the pellets as they are deposited. Pull the trigger or push the plunger, depending on the type of implanting device. Remove the needle and check to insure that the implant is in place.

The diagrams show steps for using Synovex-S; however, the procedure is similar for all implants. Please note that you are looking at the back of the ear. Follow the specific instructions for each implant product and each implanting device in the implanting procedure. The instructions are important, so read them carefully.

Steps for Implanting Synovex-S

<p>STEP 1 Implant Site</p>  <p>Divide the ear into three imaginary sections as illustrated. The implanted pellets should be deposited in the center one-third of the ear as shown. To accomplish this, the implanter needle should be inserted in the outer one-third of the ear as indicated by the "X" in the illustration. Implanting too close (causes "X") abnormal sexual behavior. Care should be taken to avoid severing the major arteries of the ear.</p>	<p>STEP 3 Pellet Implantation</p>  <p>When the needle is completely inserted, withdraw the needle approximately one-half inch. Then with continuous gentle pressure on the trigger, expel the pellets while continuing to slowly withdraw the needle. This technique allows the pellets to be deposited in a straight line in the path of the needle.</p>
<p>STEP 2 Insert Needle</p>  <p>Grasp the ear with one hand. Holding the implanter firmly with the other hand, penetrate the skin at the point shown by the "X." Thrust the needle under the skin taking care not to penetrate the cartilage. Ease the implanter forward (toward the base of the ear) until the full needle length is beneath the skin.</p>	<p>STEP 4 Inspection</p>  <p>Check the implant site. If properly administered, the implants should lie in a straight line under the skin.</p>

When to Implant

Research indicates that in order to obtain maximum gain and efficiency results, calves being fed for slaughter should be implanted early in their lives and then re-implanted at the appropriate times as indicated in the manufacturer's recommendations. This means that a homegrown club calf should be implanted early and at either 100- or 200-day intervals. The exact interval depends on the brand of implant and the length of the finishing phase. If you purchase a club calf, implant as soon as possible. For best results, reimplant your calf at the proper time.

Research also indicates that androgenic implants may have an adverse effect on marbling score in the carcass. Therefore, in order to increase the probability of your steer producing a carcass in the choice quality grade, you may want to avoid implanting or reimplanting with androgenic products less than 100 days prior to slaughter.

Federal Drug Administration regulations change frequently. Therefore, you should read the instruction on the implant label and follow the manufacturer's recommendations.

Well-managed calves with the genetic ability to gain rapidly respond best to implanting. If you are properly feeding and caring for your club steer, you should see positive results.

Activities

1. Visit a cattleman who implants his cattle. Ask him if you can observe the implanting of some calves.

2. Go to a livestock supply store. Identify the different brands of implants and become familiar with each implanting device.
3. Contact dealer representatives for several brands of implants. They will gladly furnish information on their products. Use the information to increase your knowledge and to prepare demonstrations.
4. County Extension Educators sometimes have field demonstrations where calves are implanted. Attend these when possible.
5. Give a demonstration on implanting.

Questions

1. What dollar return would you get if you implanted your steer with a product that is effective for 100 days? Assume the implant costs \$1.50 and use the price of calves at the local auction barn.
2. Use the possible side effects of improper implanting.
3. Outline the implanting procedure.
4. Use the brands of implants.

References

Oklahoma Beef Cattle Manual (3rd Ed.). Cooperative Extension Service, Division of Agricultural Sciences and Natural Resources, Oklahoma State University, Stillwater, OK. E-913.

For more information contact local County Extension office or consult 4-H website at <http://agweb.okstate.edu/fourh/>

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