

FACT SHEET

L-922

STILBESTROL FOR GROWING CATTLE

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Diethylstilbestrol, commonly called stilbestrol or DES, is a synthetic hormone-like compound used to increase gain and improve efficiency of feed conversion in growing and finishing cattle. The greatest response occurs when cattle are fed well-balanced, high energy rations. However, excellent results also may be obtained during the suckling and growing phase of production. Implant response is effective for approximately 120 to 150 days with the greatest stimulation occurring early in the implant period. Reimplanting is necessary following weaning or between winter and spring grazing programs. Cattle started on full feed for finishing after a grazing program will need to be reimplanted or fed the hormone. Implants are available in 12 and 15-milligram pellets.

Food and Drug Administration Regulations permit 10 milligrams of stilbestrol per head daily in the feed mixture. Feeds containing the hormone must be discontinued 48 hours before slaughtering.

Implant levels are not regulated but administer implants under the skin at the base of the ear 100 days prior to slaughter or according to manufacturers' recommendations.

The administration of implants and oral feeding simultaneously for slaughter is prohibited under regulations.

Visual Appearance — Undesirable side effects in steers and heifers, resulting principally from excessive implant levels or feeding, include raised tail-heads, low loins and more riding. Heifers show advanced udder development and teat elongation and are more susceptible to prolapse of the uterus than heifers with no stilbestrol. Steers also show udder and teat development.

Suckling Phase — Hormones are not recommended for bull or heifer calves being kept for breeding purposes. Steers and heifers destined for slaughter are expected to gain 15 to 30 pounds more than those not implanted. Implant at the base of the ear (figure 1) with a 12 to 15-milligram pellet

at 3 to 4 months of age. Milk production of the dam as influenced by grazing conditions and supplemental feeds affects response of suckling calves. Calves need to be reimplanted following weaning when they go on a grazing program or on full feed in drylot.

The conclusion of Texas Agricultural Experiment Station studies (B-1035, Response of Steers to Implantation of Diethylstilbestrol During Suckling, Wintering and Finishing Periods) conducted

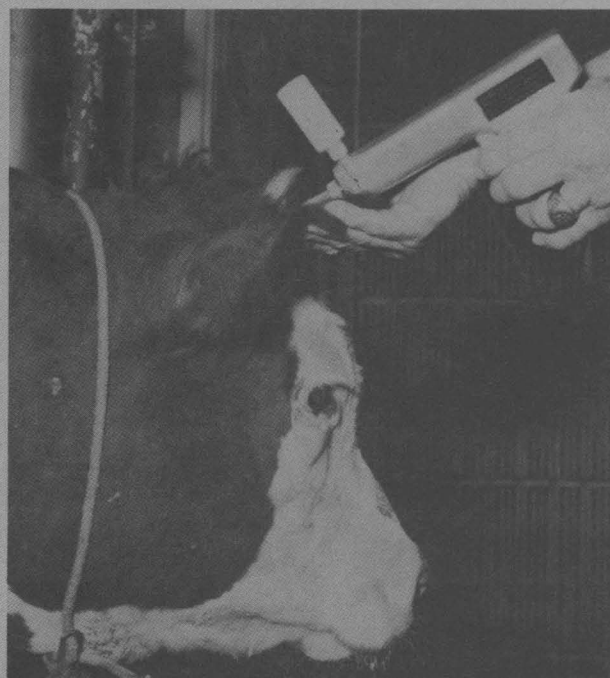


Fig. 1. Correct method of implanting.

on two different ranches during the 4-year period 1960-1963 suggests that the response of suckling calves to diethylstilbestrol implantation varies from ranch to ranch and from year to year on the same ranch. Evidence indicates that milk production of the dams as influenced by grazing conditions, supplemental feeding, age of dam and genetic potential of dam as determined by breeding and selection pressure of milk production or weaning weight, in different herds, may be a factor in calf response to implantation. The amount of grass consumed by

the calf has a direct effect on calf gain. Creep-fed calves, with comparatively high energy intake during the suckling period, might show greater response than was recorded in the above studies.

Calves which were not reimplanted during the wintering period after weaning seemed to lose much of the weight advantage they gained from being implanted during suckling, but if reimplanted at weaning they gained as well during the winter as calves which received their first implant at that time. One or two implants prior to the start of the finishing period had no depressing effects on feedlot gains of cattle not implanted for finishing, but two implants definitely depressed gain when the cattle were implanted with 36 milligrams for finishing.

Gain results of steers implanted with diethylstilbestrol during the suckling, wintering and finishing phases are shown in figure 2.

Growing Phase — Weaned steer calves or yearlings increase gains 20 to 30 pounds when implanted with 24 to 30 milligrams or when fed 10 milligrams of stilbestrol per head daily in a feed supplement. The greatest response results when cattle are getting sufficient grazing or feeds to gain at

least 1.25 pounds or more daily. Cattle remaining on grazing from winter to spring should be reimplanted with 24 to 36 milligrams of stilbestrol. Feed conversion is difficult to measure under grazing conditions but estimates on extra weight gains are 7 to 10 percent.

Finishing Cattle — Information on the use of stilbestrol in the feeding of cattle for slaughter is discussed in L-906, *Keys to Feeding Cattle for Slaughter*, available through the county agricultural agent's office.

Other Compounds producing a "stilbestrol like" response are Resorcylic Acid Lactone (Ralgro), Testosterone in combination with stilbestrol and Estradiol Benzoate in combination with Progesterone (Synovex-S) and with Testosterone (Synovex-H) has been approved for use in steers and heifers respectively. Follow manufacturers' recommendation for use.

Information in this leaflet is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no indorsement by the Texas Agricultural Extension Service is implied.

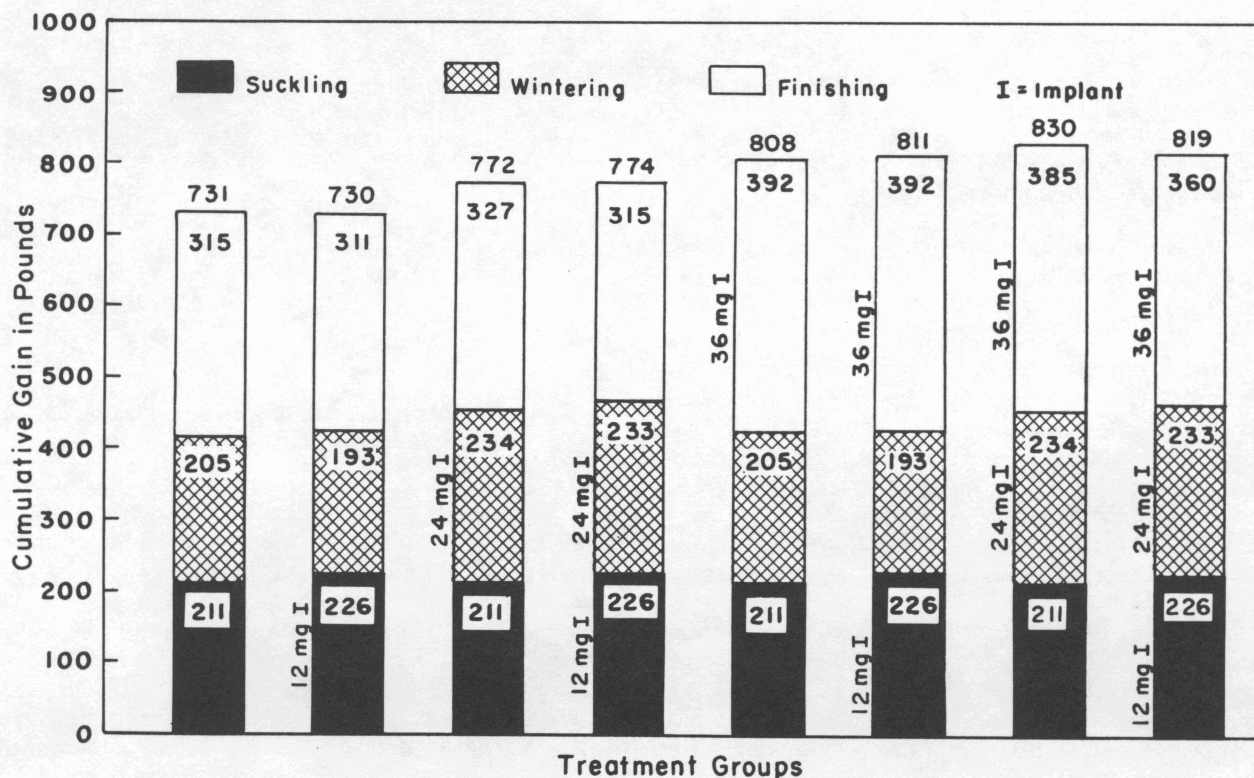


Fig. 2. Gains of steers implanted with diethylstilbestrol during suckling, wintering and finishing phases.