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Complying With Feed Additive and Drug Withdrawl Periods

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What It Takes For Zero Residues Is Time

Most drugs are accumulated in excretory organs such as the kidneys and liver, and they are found in higher levels for a longer time in these organs than in other tissue. Due to a continuous excretion of the drugs from these organs, tissue levels are usually rapidly reduced after the drug is no longer fed or injected. The rate of excretion of a drug and its end products from animal tissues must be established before it can be considered for approval by the Food and Drug Administration. Then withdrawal periods that are sufficiently long enough to permit complete or near complete elimination of the drug from animal tissues, milk or eggs are established. Once a feed additive is approved it means that the FDA considers it completely safe for use in animal feeds without unsafe levels of residues occurring in the animal tissue or its products if the withdrawal period is observed and it is fed at recommended levels.

Ways Of Complying With Withdrawal Periods For Stilbestrol

1. If the cattle are to be sold on the basis of immediate delivery.

Supplements containing stilbestrol should not be fed within 48 hours of the time the cattle are offered for sale. If this turns out to be 4 to 5 days or even longer before these cattle are actually shipped, daily gains may be reduced due to not feeding stilbestrol during this period. Removing stilbestrol for only a few days would probably not be noticeable, and over a period of 10 days to 2 weeks the loss in gain might be 2 to 3 pounds. In most cases the marketing advantage gained by flexibility of the delivery date of the cattle would probably offset any loss in gain resulting from early removal of stilbestrol from the ration.

The effects of removing all of the supplement for several days or weeks would depend on the situation. A protein deficiency in the ration would not likely affect performance within a day or two but could affect gains and feed efficiency after a few days, depending on the composition of the other ration ingredients and the rate of gain of the cattle. A ration containing a high proportion of grain may be adequate in protein without the protein supplement during the withdrawal period if the cattle are only gaining near 2 pounds per day. This same ration would probably not be adequate in protein if the cattle are gaining 2.5 to 3.0 lb. or more per day, however, and a protein supplement without stilbestrol similar to the one that was used prior to the withdrawal period should be substituted if the withdrawal period turns out to be several days or weeks.

2. Topping out lots.

If a particular lot of cattle is being topped out, a supplement without stilbestrol similar to the one being fed should be substituted and fed to the

A summary of the presentation given at Cattle Feeders Day, October 1, 1971.

entire lot of cattle for two days before removal of those to be sold. The regular supplement with stilbestrol can again be fed until more cattle are to be sold from that lot.

If none of these possibilities will be satisfactory for your operation, another alternative is to implant rather than feed stilbestrol. Research has shown the benefits are similar whether stilbestrol is fed or properly implanted. In addition, implanting offers greater flexibility in protein supplement and at the present time the feeder would not be confronted with the withdrawal problem.

3. Handling withdrawals when MGA is fed.

Withdrawal of MGA for longer than 48 hours before shipping may cause difficulties as MGA-fed heifers may come in heat 3 to 5 days after removal of the MGA from the ration. It is probably advisable to stay close to the 48-hour withdrawal period when feeding MGA to avoid problems such as excess shrinkage and handling problems that might occur by having a large proportion of the heifers in heat at one time.

Remember that cattle are considered food in transit once they are on the truck, which means they must be free of residue at this point. Also, remember that those odd lots of cattle or that steer given an injection and then sent to slaughter a few days later can get a producer in trouble as quickly as can cattle fed to finished weights. The FDA is going to increase testing for residues. Thus, it is important for each producer to observe the withdrawal periods to avoid economic loss if residues are found in his cattle and to insure continued use of drugs and feed additives by the cattle feeding industry.

WITHDRAWAL TIMES FOR DRUGS AND FEED ADDITIVES COMMONLY
USED FOR BEEF CATTLE

<u>FEED ADDITIVES</u>	<u>WITHDRAWAL TIME</u>
Stilbestrol	48 hours
MGA (Melengestrol Acetate)	48 hours
Aureo S-700	7 days
Chlortetracycline (Aureomycin)	
More than 349 mg. per head per day	48 hours
Less than 349 mg. per head per day	0
Oxytetracycline (Terramycin)	0
Zinc Bacitracin	0
Sulfa Drugs	10 days
Ronnel (Trolene)	
5.5% in block	21 days
0.25% in feed additive supplement	28 days
6% in feed additive supplement	60 days
Thiabendazole (Thibenzole)	3 days
Famphur	
1.1 mg./lb. body weight for 30 days	4 days
2.3 mg./lb. body weight for 10 days	4 days

<u>IMPLANTS</u>	<u>MINIMUM TIME FROM IMPLANT TO SLAUGHTER</u>
Stilbestrol	129 days
Synovex	60 days
Rapigain	31 days
Ralgro	65 days

<u>INJECTABLES</u>	<u>WITHDRAWAL TIME</u>
Dihydrostreptomycin	30 days
Oxytetracycline (Terramycin)	10 days
Tylosin	8 days
Penicillin	5 days
Erythromycin	48 hours
Sulfonamides (also orally)	10 days

^a Unless otherwise directed.

Be sure to read the labels for the specific drug as these withdrawal times are subject to change.