What's on a label? Important considerations for youth livestock projects

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Your 4-H livestock project makes you an important part of the **food animal** agricultural industry. Food animals are defined as any animal that is raised and used for food production or consumption by humans (farad.org/us-food-animals.html) and includes **cattle**, **swine**, **sheep**, **goats**, **rabbits**, **and poultry**. Even though your animal may be a short-term market or breeding project, you are ultimately raising an animal that will produce products that enter the food chain and provide sustenance and nutrition for a consumer. With this comes a weighty **responsibility** to ensure that the animal you raise is free of any residues at the time of milking or the animal is harvested for human consumption. Additionally, improper use of products on animals can lead to **resistance** to medications that we need to keep livestock healthy. Proper use now helps ensure lasting effectiveness in the future. Let's discuss some common misconceptions and oversights where we may have room for improvement.

Over the Counter Products

We may incorrectly assume that if we have a product that is safe for use on ourselves or in our pets, then in must be fine for livestock too. However, products that are not labeled for use in food producing animals are illegal to use in a way that is not in **accordance with their label**. For example, a bottle of **fly spray** that you might use for your horse likely contains language like "for use on horses and dogs only" or "not for use on food producing animals." **Wound ointments** are widely available for our pets, but many formulations are not permitted for use in food animals. There are many types of **dewormers** for many different types of animals, however, one dewormer does not work for all animal types in all situations. Fortunately, there are numerous products that have been approved for use in livestock- just ensure that you **read the label** to confirm that it is appropriate for your animal species.

Prescription Medications and Extra Label Drug Use

Many medications require a **veterinary prescription** and must be used precisely as prescribed. Any deviation in labeled **dose, route, rate, duration,** or **indication** of *any* drug constitutes extra-label drug use (ELDU) and must be specifically prescribed by your **veterinarian**. Sometimes ELDU is necessary to treat your animal, but it's important to note that labeled **withdrawal times** are completely off the mark whenever these changes are made. Be sure you have a prescription from your vet with the appropriate information, especially the re-calculated withdrawal time. For example, an injection of the pain-reliever flunixin (trade names include Banamine®, Prevail®, and VetamegTM) given in the muscle (IM) or under the skin (SQ) instead of intravenously (IV), has resulted in **violative residues** in **cattle** and are not approved routes. The same does not apply to swine- the similarly named product that is intended for use in **swine** should be administered intramuscularly (IM). If you think you need to use a medication on your animal in a different way than is stated on the label, make sure you consult a licensed veterinarian and obtain the proper **prescription**.

Take Home Message

Always **check the labels** on any product that you will use for your livestock project. If your intended use is not listed on the label as an approved use, you could unintentionally be in violation! Remember that you are playing an **important role** in agricultural food production and your due diligence in raising a well-cared for animal is appreciated by your consumers and provides you with valuable educational experience.



Fig 1. Both of these products are fly repellents and have some of the same ingredients. But one is labeled for use in cattle and poultry, one is only for horses and dogs. The use (dose, route, rate, duration, or indication) is not interchangeable between products!



Fig 2. Melatonin is an example of a product that is illegal for use in food animals.

To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products which are not mentioned.

Use the label and discussion questions below to consider scenarios and how you should handle them.

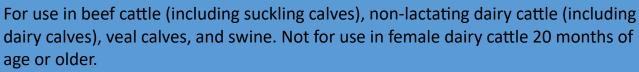
Draxxin

(tulathromycin injection)

Injectable Solution

Antibiotic

100 mg of tulathromycin/mL



CAUTION: Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian.

RESIDUE WARNINGS

Cattle intended for human consumption must not be slaughtered within 18 days from the last treatment. This drug is not approved for use in female dairy cattle 20 months of age or older, including dry dairy cows. Use in these cattle may cause drug residues in milk and/or in calves born to these cows.

Swine intended for human consumption must not be slaughtered within 5 days from the last treatment.

- 1. Should you use this antibiotic for a lamb?
- 2. Should you use this antibiotic for a pig?
- 3. Your friend has some of this antibiotic leftover from when they had a sick dairy calf. Can you use it on your pig?
- 4. The fair is next week. Could you use this product for your show steer? How about a pig? Does it matter if it's a breeding vs. a market project?
- 1. No- this product is not labeled for use in sheep.
- 2. Yes-this product is labeled for use in swine.
- 3. This product is prescription only, so you must have your veterinarian prescribe it for your animal. Prescriptions are not transferrable between different owners, even if you use the same veterinarian. Additionally, it can only be used for the animal species that it is prescribed for, even if you are the owner of both species.



Use the label and discussion questions below to consider scenarios and how you should handle them.

safe-guard®

(fenbendazole)

Dewormer for Goats

Suspension 10% (100mg/mL)

Withdrawal Periods and Residue Warnings: Goats must not be slaughtered for human consumption within 6 days following treatment.

Because a milk discard time has not been established, do not use in lactating goats.

Consult your veterinarian for assistance in the diagnosis, treatment and control of parasitism.

INDICATIONS: Goats - 2.3 mg/lb (5 mg/kg) body weight for the treatment and control of: **Stomach worms** (adults): *Haemonchus contortus* and *Teladorsagia* circumcincta.

DIRECTIONS: Administer orally. The recommended dose of 2.3 mg/lb (5 mg/kg) is achieved when 2.3 mL of the drug are given for each 100 lb body weight.

- 1. Should you use this product for a lamb? Pig?
- 2. It is Tuesday of Fair week and you realize that you forgot to worm your market goat. The sale is on Saturday. Should you go ahead and worm them?
- 3. You don't think your goat has worms, but your leader told you to worm them. Should you just give a half of a dose?
- 1. The product is not labeled for use in sheep or swine so should not be used in those species.
- 2. You should not worm as the withdrawal period will not have passed by the time the animal is sold.
- 3. You should consult with your veterinarian to determine a parasite management plan. Never guess about a dose- always administer a product as labeled.



Use the label and discussion questions below to consider scenarios and how you should handle them.

CYDECTIN™ POUR-ON

moxidectin

for Beef and Dairy Cattle

Antiparasitic

Contains 5 mg moxidectin/mL

For Treatment of Infections and Infestations Due to Internal and External Parasites of Beef and **Dairy Cattle**

Consult your veterinarian for assistance in the diagnosis, treatment and control of parasitism. If animals are likely to be reinfected following treatment, a strategic parasite control program should be established

Residue Warning: When used according to label directions, neither a pre-slaughter drug withdrawal period nor a milk discard time are required. Meat and milk from cattle treated with CYDECTIN (moxidectin) Pour-On may be used for human consumption at any time following treatment. A withdrawal period has not been established for this product in preruminating calves. Do not use in calves to be processed for veal.

Precautions: For external use only. Do not apply to areas of skin with mange scabs, skin lesions, mud or manure. CYDECTIN Pour-On is not recommended for use in species other than cattle. This product has been formulated specifically for topical use in cattle and should not be used in other animal species or by other routes of administration as adverse reactions may occur.

- 1. You heard that this product works great for goats. Should you use it?
- 2. Can you give this product to an animal as an injection or by mouth?
- 3. Can you use this product on your steer one month before the auction?
- 1. No, this product is only permitted for use in the species listed on the label- beef and dairy cattle. 2
- 2. No, this product may only be used as an external pour on and may not be given in any internal capacity.
- 3. Yes, this is an appropriate, labeled use for this product as long as it is applied properly.



Use the label and discussion questions below to consider scenarios and how you should handle them.

NITROFURAZONE OINTMENT

Antibacterial Preparation for Topical Application

For use only on dogs, cats and horses (not for food use). Keep out of reach of children.

CAUTION: Federal law prohibits the use of this product in food-producing animals. NADA 140-851, Approved by FDA

INDICATION: Nitrofurazone Ointment is a water-soluble antibacterial ointment for the prevention or treatment of surface bacterial infections of wounds, burns, and cutaneous ulcers. For use only on dogs, cats and horses (not for food use).

CONTAINS: 0.2% nitrofurazone in a water-soluble base.

- 1. Your steer cut his leg and you don't want the wound to get infected. Should you apply this ointment?
- 2. Your dairy calf has ringworm. Would this product be helpful?
- 3. Your dog burned their ear on your wood stove. Should you put some of this ointment on their injury?
- 1. No- this product is not permitted for use in any food animal.
- 2. No, this product is not permitted for use in any food animal, even if they are a breeding project. Additionally, ringworm is a fungal infection, not bacterial, so this product should not be used.
- 3. Yes, dogs, cats, and horses may be treated with this ointment and burns are a labeled indication of use.

Use the label and discussion questions below to consider scenarios and how you should handle them.

EQUICARE® FLYSECT® CITRONELLA SPRAY

WITH LANOLIN

- Kills and repels stable flies, horn flies, house flies, face flies, horse flies, deer flies, mosquitoes and gnats
- Also a grooming aid and coat conditioner

For use on horses to kill and repel stable flies, horn flies, house flies, face flies, horse flies, deer flies, mosquitoes and gnats. Also can be used as a grooming aid and coat conditioner.

DIRECTIONS FOR USE: It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

USE RESTRICTIONS: Not for use in outdoor residential misting systems. This product is not to be used around drains. Not for use on meat or dairy animals, poultry, horses or foals intended for slaughter. Not for use in farm structures or buildings housing food producing animals or poultry, or in milk rooms. Only spray in a well ventilated area. Do not use on foals under 12 weeks old. Do not spray product when food is present.

- 1. The flies are terrible in your pig barn and the fair isn't for several weeks. Should you go ahead and use this fly spray?
- 2. Your dairy heifer is being bothered by horn flies Since she's a breeding, not a market project, is this fly spray ok?
- 1. No- this product is ONLY labeled for use on horses.
- 2. No- this product is ONLY labeled for use on horses; it cannot be used on any food animal