Say Goodbye to Outdated Deworming Practices

As the saying goes, "It's a changing world." Just imagine 40 years ago when only 52 percent of American households owned color TV sets.[1] And gas cost 55 cents a gallon.[2] And in the horse industry, rotational deworming was considered the top-of-the-line treatment for equine parasites.[3] That's not the case today.

"Calendar-based rotational deworming is an outdated practice," said Hoyt Cheramie, DVM, Equine Specialist for Merial's Large Animal Veterinary Services. "New science tells us a better and more effective way is available to control parasites in horses."

First, let's review some history about equine deworming. Then we'll discuss the changes and what the future holds. Here's the past:

- An equine parasite-control program was introduced in 1966 to suppress large strongyles, the most prevalent parasite at the time.
- The new program involved treating each horse (on the property) every other month, year-round. It also proposed alternating between products to target all parasites.[4]
- The new practice excited horse owners. As new drugs hit the market, pyrimidines (pyrantel) in the 1970s and avermectin/milbemycins (ivermectin and moxidectin) in the 1980s and 1990s, rotating between products became easier. Veterinarians recommended the practice, and it became the horse owners' deworming standard.[5]

Where we are today?

We've learned plenty about equine parasites, their life cycles and the best way to control them since the '70s and '80s. For instance:

- On well-managed farms, large strongyles have become less of an issue so parasitologists shifted focus to controlling small strongyles.
- This fact may surprise many – a small number of horses in a herd, just 20 percent, produce 80 percent of parasites.[3] That's why the approach, "treating every horse," became outdated. As a result, parasitologists now recommend treatment depending on the needs of each horse.[3]

Here is today's recommended practice to determine if your horse needs treatment:

- Horse owners, with the help of their veterinarian, need to collect manure and perform a fecal egg count on each horse. By counting the number of worm eggs

shed in the feces, the horse is placed into one of three categories: high, medium or low shedder. The results will determine the horse's need for deworming treatment.[6]

- It's also important to identify the parasite-control products that are effective. Evidence exists that there is small strongyle resistance to some products such benzimidazoles and pyrantels.[6-9] A fecal egg count reduction test helps the owner and veterinarian determine the effectiveness of deworming products against specific parasites. You'll now know which products you should continue to use.

What's in the future?

Many horse owners continue to use the calendar-based rotational practice despite science suggesting it is not effective. A recent survey revealed 52 percent of horses remain on the outdated rotational schedule. Plus, the majority of these horses never underwent a fecal egg test.[10]

"We must help horse owners and veterinarians understand they might be compromising their horses' health and wasting resources by using outdated practices," added Cheramie. "Using products, without knowing if they work, is a bad practice. We have the tools to know which horses need which products and how often."

"The science of parasite management will continue to evolve, but first, horse owners and veterinarians have to catch up."

Horse owners also need to know if deworming products protect their horses against all parasites. This includes tapeworms, which have proven to be a threat to horses' health.[11] ZIMECTERIN® Gold (ivermectin/praziquantel) is an FDA-approved broad-spectrum deworming product used to effectively control tapeworms.*

More about ZIMECTERIN Gold

ZIMECTERIN Gold combines two ingredients, ivermectin and praziquantel. Ivermectin is a leading ingredient that controls a wide variety of parasites, and praziquantel specifically controls tapeworms. ZIMECTERIN Gold is approved to control more species and stages of equine parasites than any other brand, including benzimidazole-resistant small strongyles,[12] which means you can effectively control 47 species and stages of equine parasites.[12,13]

IMPORTANT SAFETY INFORMATION: *Not for use in humans. Keep this and all drugs out of reach of children. In horses, there have been rare reports of swelling and irritation of*

the mouth, lips and tongue following administration of ZIMECTERIN Gold. These reactions have been transitory in nature. Do not use in other animal species as severe adverse reactions, including fatalities in dogs, may result.

**Anoplocephala perfoliata*

[1] Television History – The First 75 Years. Available at: http://www.tvhistory.tv/Color_Households_64-78.JPG. Accessed April 24, 2012.

[2] The year 1972 from the people history. Available at: http://www.thepeoplehistory.com/1972.html. Accessed March 21, 2012.

[3] Kaplan RM. These ain't your father's parasites: Dewormer Resistance and New Strategies for Parasite Control in Horses. In: *Proceedings 2009*. *Florida Equine Institute*. Gainesville, Fla.

[4] Drudge JH, Lyons ET. Control of internal parasite of the horse. *J Am Vet Med Assoc.* 1966;148:378-383.

[5] Reinemeyer C. Controlling strongyle parasites of horses: a mandate for change. In: *AAEP Proceedings*. 2009;55:352-360.

[6] Kaplan RM, et al. Prevalence of anthelmintic-resistant cyathostomes on horse farms. *J Am Vet Med Assoc*. 2004;225(6):903-910.

[7] Uhlinger CA, Kristula M. Effects of alternation of drug classes on the development of oxibendazole resistance in a herd of horses. *J Am Vet Med Assoc*. 1992;201:51-55.

[8] Kaplan RM. Anthelmintic resistance in nematodes of horses. *Vet Res*. 2002(33):491-507.

[9] Swiderski C, French DD. Paradigms for parasite control in adult horse populations: A review. In: *AAEP Proceedings*. 2008;54:316-321.

[10] Data on file at Merial.

[11] Proudman CJ, Trees AJ. Tapeworms as a cause of intestinal disease in horses. *Parasitol Today*. 1999;15(4):156-159.

[12] Based on data provided in the ZIMECTERIN Gold FDA Freedom of Information summaries.

[13] Based on data provided on the ZIMECTERIN Gold label.