

## **Animal Facts**Parasite Resistance

There is an age-old battle going on in our horses between their own immune system and the parasite invaders of the gut.

Commonly referred to as worms, these enteric parasites infect the horse after they have been ingested and moved themselves into the gastrointestinal tract. The human role in this cyclic battle has been to administer 'deworming' drugs and to limit the environment for the worms.



## Are we Losing the Battle for Our Horses?

Parasites (or worms) have been around for a very long time. The eggs or larva are ingested from the environment and mature into adults in the horse. They complete their life cycle in the host (the horse's GI tract) over the course of about 3 weeks (in general) to reproduce and lay eggs or larva that are passed out into the manure to be ingested by the next unsuspecting horse. This is the circle of life for the common horse parasites.

Our aim is to eliminate these parasites as they can cause some unwanted side effects to the horse's body. Some worms grow so rapidly in number that they can occlude or clog off the intestine and cause severe colic in the horse. Some worms migrate out of the intestine causing massive internal damage as they travel into the liver, lungs, spinal cord and brain.



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Some worms cause irritation of the stomach or around the tail head. Most of the worms will cause a decline in the health and fitness of the horse in general, if not removed.

About 30 years ago, all dewormers were administered by nasogastric tube by a veterinarian. When this was the case, deworming was usually only done once a year and there was a limited amount of deworming drugs available. Following the advent of the tube paste dewormer, the duty of deworming the horses was transferred from the veterinarians to the horseperson. Unfortunately, the medical knowledge about the worm life cycles, medical complications, drug interactions and ultimately drug resistance was not transferred to the horseperson. The result has been a steady increase in the frequency of deworming horses during the year and the parallel increase in resistance to the medications used.



## Parasite infections must be treated the same as a bacterial infection.

We need to identify the type of parasite involved via fecal egg evaluation and then choose the correct deworming medication for the job.

This requires a veterinarian with the skill and knowledge to help guide the treatment of parasites if we are going to slow the progression of parasite resistance from overused medications.

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