

EVERYTHING•ID RECOMMENDS the following

Modified McMaster Testing Method:

Supplies Needed:

- ▶ McMaster's Method Slide
- ▶ 50ml Beaker
- ▶ Pipette, Tweezers
- ▶ Microscope (Mechanical stage recommended)
- ▶ Flotation solution (16oz hot water + 1c. epsom salts)
- ▶ Fresh fecal sample for testing

1. Measure 26ml of flotation solution into beaker. Add small bits of fecal sample until beaker measures 30ml.
2. Using tweezers, crush and mix the sample with an "X" shaped motion. (*Stirring in a circle will draw the eggs into the center, affecting the accuracy.*)
3. While stirring with the pipette in an "X" shaped motion, suction enough liquid to fill both counting chambers
4. Fill the McMaster chambers; place within the microscope stage.
5. Count the parasite eggs for each type of parasite in both chambers and record separately. (Do not count the eggs outside the grid.)
6. Multiply the total eggs counted per parasite species by 25. This is your **Eggs Per Gram**.

Fecal Egg Count Reduction Test (FECRT)

Administration of an anthelmintic does not guarantee the animal has been dewormed. A Fecal Egg Count Reduction Test (FECRT) can be used to assess the anthelmintic efficacy by calculating the percentage of parasites that survived treatment of the drug administered. To perform the test:

Conduct a FEC before deworming followed by a second FEC 14 day post-treatment. A reduction of less than 90-90% indicates resistance.

FECRT Calculation:

$$\frac{\{\text{pre-treatment EPG} - 14 \text{ day post-treatment EPG}\}}{\text{EPG (pre-treatment)}} \times 100 = \% \text{ FECRT}$$

For Example:

$$500 \text{ EPG [pre treatment]} - 25 \text{ EPG [post-treatment]} = 475 \text{ EPG}$$

$$475 \text{ EPG} / 500 \text{ EPG} = 9.5 \quad \longrightarrow \quad .95 \times 100 = 95\% \text{ reduction}$$

SLIDE CARE INSTRUCTIONS

1. Thoroughly rinse out the McMaster chambers with warm running water.
2. Let slide air dry. If the chamber becomes dirty, soak for only a few minutes in warm water contained dish soap. Do not soak in soap for long periods as this will cause chamber to become cloudy.