



WHY DOESN'T MY FLEA PRODUCT WORK?

To understand why you may still see fleas on your cat despite being diligent with applying a flea product regularly, we need explain what the products are up against, that is, explain how well fleas multiply.

Each flea can lay up to 2000 eggs and the life cycle is only 3 weeks. Let's assume a cat starts with only 1 flea and is somewhere that has never been exposed to fleas and that each flea lays only 100 eggs. After 3 weeks, there will be 100 fleas ready to jump on the cat. If they all hatch and infest that cat and lay 100 eggs and this cycle continues, then after 6 weeks, the cat will have 10, 000 fleas and after 9 weeks, the cat will be burdened by 1 million fleas!!!!

Back in the real World, not every flea egg laid hatches but they can survive in the environment for years. There is usually exposure to multiple cats and dogs over years so a typical backyard in a neighbourhood of an average 5-10 cats over the last 20 years will literally have BILLIONS of fleas waiting to jump up. Of course, any fleas killed by a product in a 24-hour period will be replaced in each subsequent 24-hour period.

The most commonly used products to kill fleas are the 'spot-ons' that are usually applied to back of the cat's head. The newer versions of these are all effective at killing fleas and are safe for cats (some older versions are available at supermarkets and are not as safe for the cats).

The main products like this all have their strengths and weaknesses. Some of them are effective for worming and other parasites as well as fleas. [Their spectrum against parasites can be seen [here](#).] These products also vary in how quickly they kill fleas as well as the percentage of fleas still being killed after 4 weeks¹ (when the next application is due).

These differences are summarised in the following table:

Product	Time to kill fleas	Fleas Killed at 4 weeks
Revolution®	24 hours	99%
Frontline Plus®	12 hours	83%
Advantage®	6 hours	72%
Advocate®	6 hours	72%

(NB Advocate® has the same drug to kill fleas as Advantage® but has another drug added for the activity against other parasites)

To summarise this table, Advantage® kills fleas quickest but has the least effect in the last week while with Revolution®, you may still see fleas since they are taking longer to die (even though they mostly all dying). Some dermatologists will recommend Advantage® because of this faster action but recommend for it to be given every 2 weeks. We prefer to recommend Revolution® because of the greater number of fleas killed by the fourth week as well as its ability to make flea eggs sterile. If you are using Revolution® but your cat is still bothered by fleas, Capstar® tablets can be given as required (these kill fleas within 24 hrs but only last a day or 2).

1. Dryden MW, Smith V, Payne PA, McTier TL (2005) Comparative speed of kill of selamectin, imidacloprid, and fipronil-(S)-methoprene spot-on formulations against fleas on cats. Veterinary Therapeutics; 6: 228-36. [Link to PubMed](#)