

# **APPROPRIATE USE OF ANTIBIOTICS**

**By Josie Pyle**

This article was prompted by the increasing availability of antibiotics through outlets such as bird dealers, pet shops and trading tables of bird clubs or societies. The ease of access of antibiotics may prompt aviculturists to try a quick fix for a sick bird, or to try a dose "just in case". If your bird becomes ill, using one of these medications may seem like a plausible thing to do. However, nothing can be further from the truth.

If your bird appears to be "under the weather", it is already likely to be extremely unwell, but the cause may not be a bacterial infection. Like other prey species, birds hide their signs of illness until they can no longer do so. It is a form of self preservation. In the wild, they are preyed upon by many animals. So a bird that appears ill will be quickly noticed by a predator. By the time a bird's illness has become readily apparent, it has probably been declining for a period of time. Feathers - especially when fluffed - are very good at camouflaging weight loss. Quick diagnosis and treatment can be critical.

Giving a sick bird antibiotics is wasting valuable time, especially if we have no idea what the problem is. Is it viral? bacterial? fungal? systemic? Antibiotics only work on bacteria. Further, some antibiotics are only effective against certain bacteria. So giving them, when the cause of a disease is not known, may not only be a waste, but can lose valuable time in saving a sick bird's life. Unfortunately there is no "magic bullet" that will treat all diseases. Over the counter antibiotics are designed to be added to the birds water, but putting medication in the drinking water may be ineffective. Many sick birds are not eating or drinking - so may not ingest the antibiotic anyway. The antibiotics designed to be put in water are often not the most effective ones to use, even if a bacterial infection is present.

For example: while diarrhoea maybe due to a bacterial infection, loose droppings maybe a symptom of excessive water consumption. This could be the result of diabetes, liver disease, kidney disease, or some other systemic illness. In such cases antibiotics are useless, or may even make the problem worse.

However the main concern of indiscriminate use of antibiotics is the dreaded spectre of resistance. Antibiotics used at too low a dose, or for too short a period (even if for an appropriate disease) will simply encourage surviving bacteria to be resistant to that antibiotic. To make matters worse, we now know that bacteria can share that resistance. This means that if a bird you buy has bacteria resistant to an antibiotic, all

birds in contact with that bird may carry bacteria with the same resistance. For example: most Neophemas carry *Chlamydia psittaci*, the cause of Psittacosis. Indiscriminate use of the only really effective antibiotic *Doxycycline* (marketed as *Psittavet*) raises the possibility of a resistant strain of Psittacosis, which may be transferred from bird to bird, or even to humans.

One of the main precepts of medicine is “the right drug for the right disease and at the right dose”. This should be carried over to veterinary medicine. If you do use an antibiotic, use it at the dose recommended, and for the full duration recommended. If in doubt, ask an Avian Vet. Even if the bird concerned has little monetary value, the disease it carries may spread to the rest of your collection and the knowledge gained from the consult may be more than worth the fee.

**Remember: overuse of antibiotics leads to antibiotic resistance**