



USE OF ZYMOX OTIC® ENZYME IN BIRDS

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Natural enzyme solutions are available for topical use with exotic species. Zymox Otic Hydrocortisone Free® (formerly Zymox-E®) is recommended for the treatment of bacterial and yeast infections in the ear of small mammals, and Zylafen® is recommended for bacterial and fungal skin rashes in reptiles (Pet King Brands, www.petkingbrands.com).

Both products contain lysozyme, lactoperoxidase, and lactoferrin. Lysozyme is a naturally-occurring enzyme found in tears, saliva, and other body fluids. It is capable of destroying a wide range of gram-positive microorganisms by



enzymatically degrading the glycosidic linkage of bacterial peptidoglycan. Lactoperoxidase is also found throughout the body in secretions such as tears and saliva as well as middle ear mucosa, and it catalyzes the inactivation of a wide range of microorganisms, including viruses and fungi. Lactoferrin is an iron-binding protein that occurs in neutrophil secondary granules and external secretions. This protein expresses anti-inflammatory and antimicrobial effects by its iron binding ability and contributes to anti-microbial host defenses by inhibiting bacterial growth through iron deprivation.

Zymox Otic® has been useful in birds for the treatment of superficial skin wounds. It is non-oily, non-irritating and does not leave a residual buildup on the skin. In particular, it has been successful in resolving lovebird skin infections — those oozing, gray skin lesions that occur especially under the wings and don't respond to topical antibiotic/antifungal solutions alone. We're probably seeing secondary bacterial/fungal infection due to mutilation/malnutrition, and perhaps the enzyme helps by reducing the itching during healing.

I have also added Zymox Otic® to lactated Ringer's solution or Normasol® for sinus flushes in cases with bacterial or fungal involvement. Because it is made of all natural components, there are no side effects or adverse reactions.

