Eclectus and Vitamin Supplements

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eight years ago, one of the most common problems that I get calls about has to do with symptoms caused by too much supplementation of vitamins and minerals. I believe the problem is mostly caused by too much vitamin A.

First, I will explain the differences between vitamin A and beta carotene. Vitamin A is found only in animals, humans and eggs. It is manufactured by the animals and humans and stored in the liver and in egg yolks. Vitamin A is not present in any green vegetable or fruits; beta carotene is present in vegetables and fruits. The body manufactures one molecule of vitamin A from (using) three molecules of beta carotene. I believe that you can feed

two to three good sources of beta carotene daily and get an adequate amount of vitamin A into your birds via the body-manufactured route. These food sources can include dark greens, any fruits or vegetables that are yellow, orange, red or dark green. However, I do not recommend feeding citrus fruit. Darker greens have a higher beta carotene content than lighter greens have

So, we might conclude, it would be very difficult to overdose vitamin A when it is manufactured by the body from natural beta carotene sources.

Vitamin A *can* be overdosed in the natural or synthetic forms and I believe it *can* be quite toxic. Most of the commonly used bird vitamin and mineral supplements contain highly concen-

trated forms of pure (natural or synthetic) vitamin A which is stored in the liver and the excess is *not* excreted by the body. I believe that if too much of the pure forms of vitamin A is fed too often, it will eventually build up to a toxic level in the liver and possibly cause harm to that organ and perhaps to others as well.

Apparently there isn't any scientific proof of this happening in birds, so this is just my belief. It can take quite awhile for the symptoms to show up anywhere from several months to one or two years. Symptoms show up much faster in birds that are fed any of the pelleted diets. This is because pelleted diets are already fortified with all the necessary vitamins and minerals. Any additional supplementation (more than once or twice a month) will probably create an overdose. Birds on seed, vegetable and fruit diets (with supplements added) will take much longer for overdose symptoms to show up. Birds not on a pelleted diet should probably have supplementation no more than once a week.

Overdose Symptoms

Symptoms include foot/toe twitching/jerking (sometimes called toe/foot tapping), wing twitching/jerking, feather plucking/chewing, and self mutilation. All of the twitching/jerking movements are completely involuntary indicating that the nervous system is probably involved. What probably happens is that the liver enlarges, due to toxic levels of vitamin A, and puts pressure on the surrounding nerves which go to the feet and wings thus causing the twitching/jerking motions.

Please do not confuse the wing twitching/jerking with other wing movements which are completely normal, such as quivering (when a bird is excited, when a female wants a male to mount her), or when a male flicks his wings to expose the red beneath to excite the female.

The self mutilation and the feather plucking/chewing I believe to be caused by liver problems which cause the skin to itch. Itchy skin is a common symptom in humans with liver problems.

When any of these symptoms appear, eliminate all supplementation. If the symptoms do not disappear or improve dramatically, take the bird to a vet. Other problems can cause some of these same symptoms.

