## Veterinary Viewpoints

edited by Amy Worell, D.V.M. Woodland Hills. California

**Question #1:** What's the story with sunflower seeds? Do they really cause hyperactivity in parrots? M. Thomas, California

Answer #1: Sunflower seeds are not psychedelic. They are high fat content seeds that "junk food" birds love. Like all seeds, they are deficient in calcium, vitamin A, and protein. Sunflower seeds, as well as almost all the seeds fed to birds in this country, are not native to Central and South America or the Pacific, Asia, or Africa. They are organic but not "natural"

I do use some sunflower seeds in my bean, wheat and corn mix which I sprout for my birds, but I do not feed them raw. I would suggest discussing with your veterinarian a proper expanded diet for your birds. The Association of Avian Veterinarians has an excellent booklet on feeding. Ask your veterinarian for a copy.

James M. Harris, D.V.M. Oakland, California

Answer #2: There have been rumors for some time that sunflower seeds are addictive in parrots and may cause them to become hyperactive. There is no scientific evidence to support this. Sunflower seeds are a tasty, high energy food source that parrots, people and a lot of other animals like. Parrots will eat sunflower seeds to the

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American Federation of Aviculture P.O. Box 56218, Phoenix, AZ 85079-6218 (602) 484-0931 exclusion of other foods. Sunflower seeds are deficient in vitamin A and D as well as calcium and essential amino acids and are very high in fat. They should be fed to parrots only as part of a balanced diet.

Nicole VanDerHeyden, D.V.M. Indianapolis, Indiana

Answer #3: Many individuals, as well as one well-known seed distributor, have propagated the myth that sunflower seeds are addictive because they contain an addictive narcotic substance called papaverine. This narcotic substance is said to cause hyperactivity among those who partake of it. At this point in time, there is no evidence to support the presence of papaverine in sunflower seeds or that it would be a harmful ingredient if, indeed, it were present.

Papaverine is usually classified as a muscle relaxant rather than a narcotic. So, if such a substance were found to be present in sunflower seeds, a bird eating the seeds possibly might be relaxed and enjoying life, rather than stressed and hyperactive as has been suggested.

Amy B. Worell, D.V.M. West Hills, California

**Question #2:** What could cause an occasional white feather to appear on a Hyacinth Macaw? Is there a dietary deficiency?

A. Boblett, Missouri

Answer #1: Feather coloration in parrots involves both pigments and structure. Melanins and lipochromes are pigments that produce black, brown, yellow, and red colors while blue color is structural as it results from light scattering by small, air filled spaces in the feathers. The green

feather color of most birds including parrots is due to a combination of structural blue and vellow pigment. White feathers in blue feathered birds and yellow feathers in green feathered birds are both due to the lack of the microscopic air filled spaces within the feather structure. There are numerous causes for these structural changes including physical damage to the follicle producing the feather, deficiencies of amino acids or vitamins used in making the proteins in the feather, and diseases, hormones or toxins that may affect the growth of the feather. One or two white or yellow feathers are usually due to damaged follicles and are usually of no concern. Numerous abnormal feathers are indicative of an overall health problem, particularly malnutrition or

Nicole VanDerHeyden, D.V.M. Indianapolis, Indiana

Answer #2: Feather color in birds is a function of pigment, both produced by the bird, from the diet, and from the feather structure itself. Blue colors are produced by feather structure. I suspect the occasional white feather is just an oddly formed feather and not the result of diet.

James M. Harris, D.V.M. Oakland, California

Answer #3: Through the years, I have observed a number of Hyacinth Macaws with a white feather among the blue feathers. In all these birds, the white feather was one of retricial feathers (tail feathers), rather than occurring elsewhere on the body.

These birds have been surgically sexed individuals of both sexes, and all have been clinically normal. Some of these birds had produced viable offspring and others were not part of an egg laying pair. These birds were fed a variety of foodstuffs, which generally included a seed mixture supplemented with fresh food items and coconut.

As to the exact cause of such an occurrence, one can only speculate. Certainly, possibilities including genetics, regional variation, and feather follicle damage could be included in the differential. Whether dietary imbalances are significant is not known.

Amy B. Worell, D.V.M. West Hills, California ●