From the best people on any given subject. A broad spectrum of viewpoints are presented. About everything so...years where she sees a large number of avian patients. She has a special interest in pediatrics and nutrition and, as an aviculturist, is currently working with nine species of cockatoos, African gray parrots, scarlet macaws, and pionus parrots. Dr. Worell is active in a number of professional associations and is a frequent lecturer on avian medicine.

A unique thing about Veterinary Viewpoints is that a number of veterinarians are consulted and a broad spectrum of viewpoints are presented. You won't get just one veterinarian's opinion. No single vet can know all about everything so Dr. Worell will solicit answers from various vets. This way we hope to get the best answers from the best people on any given subject.

Question: I have been raising cockatiels for many years and have not really had any problems until this year. I have pairs set up in individual cages and also in aviaries with varying numbers of birds per flight. My birds are presently on seed, a variety of fresh foods that are offered daily, and a vitamin mix on the fresh food. I have lost 15 babies this year, while the babies were still in the nest. The babies were of various ages and would look good one day and be dead the next! What am I doing wrong?

C. Thomas, Texas

Answer: Deaths of nestling cockatiels may be due to many causes. This list should include inexperience of the parents, genetic abnormalities, and deaths from an overgrown variety of microorganisms. In young cockatiels, overgrowth of the yeast Candida albicans is common in both the crop and the upper intestinal system. As overgrowth of this organism is usually considered to be a secondary problem, the presence of another cause must not be overlooked. This may be stress from a number of causes, including the presence of bacterial pathogens or shedding of the chlamydial organism from the parents. An examination of several babies by an avian veterinarian is advised to explore these and any other potential problems leading to the deaths of the nestlings. Any future deaths should be presented for a thorough post mortem examination to uncover potential problems before they may become epidemic.

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

Question: Chico, my pet double yellow headed Amazon, was recently diagnosed by a veterinarian to have a respiratory infection involving the sinus. He said the infection may have been due to a lack of vitamin A in the diet. Chico was given a vitamin injection and placed on antibiotics. He is doing much better now, but I'm concerned the infection may reoccur. How can I prevent this from reoccurring and what foods should I feed that are high in vitamin A?

D. Farman, New York

Answer: Upper respiratory infections, including sinusitis in Amazons, are frequently encountered in a veterinary practice. The clinical signs may vary from wheezing, sneezing, a discharge from the eyes and/or nostrils, to a puffy swelling around the eyes. These infections may be due to a number of microorganisms, including both bacteria and viruses. Often, more than one organism is the culprit. In addition, it is felt that a deficiency of vitamin A may open the way for these organisms. As vitamin A is necessary for the maintenance of epithelium in the body, a deficiency will cause changes to occur microscopically to certain membranes of the respiratory system at the cellular level. Certain cells undergo changes, including the mucous glands. These changes increase the build-up of a substance called keratin and allow the entrance of harmful microorganisms into the tissue. Thus, a respiratory infection may be the result in the bird.

A well rounded diet including a good source of vitamin A is, therefore, very important to maintain the health of our feathered friends. A variety of foods should be offered daily, especially if a seed diet is being fed. All seed diets are notoriously deficient in a number of necessary substances, including vitamin A. Foods high in vitamin A would include dark green leafy vegetables such as broccoli and spinach, and dark yellow vegetables such as carrots and yams. Fruits such as cantaloupe and papaya are also high in vitamin A. An additional source would be cod liver oil. Doses suggested for a budgie are one drop several times a week, and 8 drops several times weekly for a macaw. Birds with body weights in between these two birds can be gauged accordingly.

An excellent source of nutritional information is the Composition of Foods booklet. This is available through the USDA, and should be ordered from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. This is Agricultural Handbook No. 8. You will need to write first for the current nominal booklet fee.

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

Question: I have a large number of pigeons that I raise for show and sale. Recently six pigeons, from different lofts, have been acting very strangely. They will be walking normally, then may either fall down or become very wobbly. They rotate their heads in funny positions, as if looking at the stars and then the ground but with the head twisted at the neck. They are eating and active otherwise, and the mates of these birds are all okay. I have introduced no new birds in five months and no birds have died. What
could be the problem and what should I do?
M. Hatfield, California

**Answer:** A number of possibilities come to mind with a history such as this. As you did not state if the birds have been given the paramyxovirus vaccine, I will include this disease as a consideration. The paramyxovirus can cause a number of neurological signs in pigeons, including what you have described, but often with larger numbers of birds being affected and very heavy death losses. I have seen a number of birds that had been vaccinated with the PMV vaccine that later developed signs suggestive of a vaccine reaction or even a mild case of the virus from the vaccine. I also know of one case in which a bird that received a second vaccine died following the vaccine. I suspect this may have been an anaphylactic (allergic) reaction as the post mortem exam showed only signs compatible with that diagnosis.

A second possibility would be infection with the bacteria *Salmonella paratyphioid.* Similar signs could be seen. I would suggest that one of the birds be sacrificed for a thorough autopsy. The veterinarian should include in this exam, cultures of the heart and liver.

A third possibility would be toxicity to some substance. This could be to food or even from the deworming medication, levamisole.

I suggest you seek local veterinary advice for an exam of your birds.
Roger Harlin, D.V.M., Oklahoma City, Oklahoma

**Question:** I have noticed that a number of my finches will pass whole seeds in their droppings. This seems to come and go and the birds seem fine otherwise. Is this something I should be concerned about?
A. Thompson, Washington

**Answer:** The passing of whole, undigested seeds in the droppings is not a normal condition in birds. Therefore, this is a condition that should be looked into further. Possible causes would include inflammation of the pancreas, blockage in the gizzard, infection in the intestinal system, and presence of intestinal parasites, such as gizzard worms. I would suggest a fecal examination of the stool for parasites or worms, and a culture of the stool if that is nonproductive.
Amy Worell, D.V.M., Woodland Hills, California