Question
What is the benefit of using lactobacillus products for birds while on antibiotics? I am especially interested in this for baby birds. Can it be harmful? How much of which product should I use and how often? Thanks for your help.
S. Tucker, New Jersey

Answer #1:
The main benefit of using lactobacillus products for birds is in the profit to the seller. There is no scientific proof that lactobacillus has any benefit to the bird other than creating an acid environment in the intestinal tract. Using a little apple vinegar in the drinking water would work equally well at much less cost to you.
James M. Harris, DVM
Oakland, CA

Answer #2:
The use of lactobacillus products in animals and birds has been controversial. Numerous studies indicate that in some instances giving animals beneficial bacteria is helpful. The most dramatic affects occur when live, species-specific bacteria (bacteria that originates from that species) have been given to animals that have compromised immune systems and that have been exposed to pathogens.

How these conditions apply to many captive birds, including baby psittacines: we suspect that they are immuno-compromised due to subtle malnutrition and intense management schemes (lots of birds in a small space leading to stress and increased exposure to pathogens). Baby birds, especially those hatched in an incubator which were never fed by their parents, may be especially susceptible to alterations in their intestinal “microflora” as they are not receiving food from their parents which contains species-specific bacteria. This is because baby birds hatch with no bacteria in their intestines and are susceptible to infections from opportunistic bacteria because they have no beneficial bacteria to combat these “bad guys.”

Giving baby birds antibiotics can further compromise the bird because antibiotics can reduce the normal level of good bacteria in a bird’s intestinal system allowing potential opportunistic bacteria a fertile ground to multiply. In these cases it will not hurt a bird to receive lactobacillus products, unless the product also contains vitamins and minerals which could lead to hypervitaminosis and hyper mineralization. It may not help either as most products contain non-species specific bacteria, especially in the most severe immunocompromised animals under poor management. Possible recommendations include:

1. Use viable lactobacillus products (contain live bacteria).
with your veterinarian.

James M. Harris, DVM
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**Answer #2:**

Liver biopsies are performed in birds where a liver disease is suspected, not just in any sick bird. Other laboratory tests and radiographs may not show that anything is wrong with the liver, whereas a biopsy will. The liver biopsy is the most specific test we have currently in birds for detecting liver disease. If your veterinarian suspects liver disease in your bird, it may be appropriate for a biopsy, however there are risks. Birds with liver disease often have altered liver, heart, and respiratory function and are susceptible to bleeding disorders and could be more at risk to the negative heart and respiratory affects of anesthesia. Most birds will not bleed much after a biopsy is performed, although deaths due to hemorrhage do occur. A thorough evaluation of each case will decide if the benefits of performing a liver biopsy outweigh the risks of the surgery.

A liver biopsy will hopefully tell what caused the original liver disease. In some cases the biopsy will only tell that there is chronic liver disease but the actual originating cause can not be determined. Your veterinarian will also take a culture of the liver to try and find the cause of the disease (hepatitis).

The liver biopsy can be taken through a mid-abdominal “keyhole incision” or from the side, such as when bird is surgically sexed. In an obese bird, the liver may not be easily visualized through a mid-abdominal approach as the lobes are being pushed to the side because of the fat. A lateral approach can be performed, however bleeding can be difficult to control from this approach.

**Answer #3:**

There are two methods for hepatic (liver) biopsy. Both methods involve a general anesthetic, which is usually isoflurane (and oxygen). This anesthetic is extremely safe in avian patients. The first method of liver biopsy involves making a small incision in the abdominal wall, usually just below the end of the liver lobe itself. This method allows for direct visualization of the liver. A small section, usually wedge shaped, of the liver can then be easily removed. If bleeding occurs, it can easily be controlled with direct pressure or use of a product such as Gelfoam. The abdominal incision is then closed with absorbable sutures. The second method involves the use of a rigid endoscope such as is used for surgical sexing of birds. The liver is then viewed through the endoscope and a small piece of hepatic tissue is removed by a special biopsy instrument that is passed in a channel that runs right next to the endoscope. This method is less invasion but the liver is visualized through the endoscope rather than directly with the human eye. Bleeding, if it occurs from the liver biopsy, is harder to control by this method. Different veterinarians will prefer the two methods for a variety of reasons. Assuming you are comfortable with the level of medicine practiced by your avian veterinarian, I would suggest deferring the method choice to his or her recommendations.

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