

THE GOOD PROBIOTICS FOR YOUR BIRDS

Supplementing your birds' diet with probiotics becomes more and more attractive for bird owners.

THE BENEFICIAL HEALTH REASONS ARE VARIOUS:

- Increases immune system strength.
- Assures optimum guts microflora (essential for good digestion).
- Helps parent birds to inoculate their young when they are still in the nest.
- Restore guts microflora after antibiotic treatment.
- Potentially increases lifespan.

The use of 'friendly' bacteria to prevent infectious diseases is relatively new. It is part of the new biotechnologies called nutraceuticals. The first man who discovered the benefits of the bacteria therapy was a Russian microbiologist and zoologist named Elie Metchnikoff from 1845-1916, the father of modern immunology.



Lactobacillus acidophilus
(humain strain)

In 1928 Sir Alexander Fleming discovered penicillin and this was a tremendous breakthrough for medical science. Bacteria therapy became less interesting since the use of antibiotics was the solution for most infections. Antibiotics were used widely and extensively. Some antibiotics were added as 'preventive treatment' in farm animals' feed. Inevitably, pathogenic bacteria did what they were naturally programmed to do, they evolved to become more and more resistant.

Since man was now challenged and incessantly preoccupied by highly resistant strains of super bacteria, and now antibiotics were commonly found in his meat, the use of preventive antibiotics was reduced in the 70's, especially in farm animal

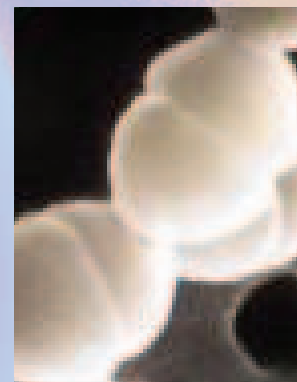
feed. Despite this, farmers always had the same needs, threatened by pathogenic bacteria. Breeding animals in relatively stressed environment, overcrowding in less than ideally ventilated or sanitized facilities, harmful germs were still frequently present. All the elements for an infection to occur. A wave of avant-garde naturopathy turned back to probiotics. In theory, the solution could come from the animal itself, by boosting the immune system naturally with the aid of probiotics.

Probiotics are part of Functional Foods (foods that promote health benefits) they are designer foods with effects that extend beyond basic nutrition. They can serve to prevent certain illnesses, strengthen the immune system, or promote good digestion. Such health effects are achieved by adding certain active substances. Another term for such a food can be "nutraceutical" (nutrition and pharmaceutical).

Probiotics are live bacteria, which survive but do not stay in the host digestive system for very long. When they are present, they help the development of native beneficial bacteria. Probiotics are like tourists in a city. The city manager knows that tourists are essential to the economic health of the town, so they prepare the place for them, they build hotels, restaurants and promote scenic sights to attract tourists. The more successful the tourist outcome, the higher the revenues to the residents and the town is happy and flourishing. However, unfortunately, probiotics never stay around for a very long time.

Using probiotics in the agricultural industry is advantageous, other wise no money would be spent on it. The young grow faster, producing a better meat (muscle) conversion to food ratio. That means that for the same amount of feed, animals grow faster with less fat and more muscular weight. Enhancing the digestive system to increase growth performances.

When probiotics are used they 'shift' the natural intestinal bacteria flora to the good side. The result is a healthier digestive system with less pathogenic bacteria. Most pathogenic bacteria are known to produce toxins that are normally filtered by the internal organs such as the liver and the kidney. Elie Metchnikoff's theory claims that when using probiotics, the digestive system has fewer toxins to clean, reducing the stress on the detoxifying organs and thus potentially expanding lifespan.



pathogenic bacteria
Enterococcus



Bifidobacteria

Bacteria are the founding members of all living organisms; they were most probably the first live 'animals' on the planet. There is 10 times more living cells in the digestive system than in the complete human body. Immediately upon

the arrival of a new born, instinctively the first thing that the mother will do is inoculate their young with friendly bacteria to protect them against infections and stimulate their immune system. For mammalian species these friendly bacteria are part of the milk we refer to as colostrum. In avian species the friendly bacteria are given by their parents directly regurgitated from their digestive system when they are fed. It is primordial that the parents have an excellent gut microflora, since it is the foundation of raising healthy chicks.

When a bird is stressed it will frequently have loose droppings. This is the result of the digestive system's blood flow reduction. When stressed, blood flow concentrate to vital organs such as the heart and brain. This phenomenon shows a disruption to the microflora that can lead to diarrhea, potentially dehydrating the bird, and result in weakness and predisposition to infection. When offering supplemental probiotics, since the flora is stronger, this phenomenon is much less apparent. For birds in captivity stress can arise from a change in the environment, during quarantine, the onset of the breeding season, overcrowded aviaries and other factors.

There are numerous benefits that can come with the usage of probiotics for bird keepers and breeders. But what really ensures a product to be actually effective? When using a good probiotics you should see differences in the dropping within 24 hours. They will be firmer and look healthy. This is the first sign that can give us insight to the product's effectiveness. Probiotics for exotic birds must be specially designed for them, they must be avian specific. Since a bird's body temperature is higher than mammals the probiotic type bacteria found in the gut flora are different. They must be specifically selected for their effectiveness on exotic birds. It is a mistake to think that probiotics that work on dogs, pigs, humans or even poultry will be ideal for your parrot.

The product must be formulated following scientifically established technical criteria and proper testing. The specifically selected bacteria must stay alive in the bird's digestive system long enough to do its work. Proper microbiological analysis must be done by the manufacturer to assure that live bacteria will be found in the crop, stomach and droppings of the bird. Ideally the product should be in a powder form and properly packed to prevent humidity and contamination. Probiotic bacteria are relatively fragile and premium products are prepared without other filler like vitamins or other food supplement. They should be kept in the refrigerator.

Recent studies have shown that the concentration is a very important factor when feeding probiotics. A concentration of a few hundreds of millions of colony forming units (CFU) is insufficient. Proper concentration must be in the billions CFU/gr. Probiotics overdose is practically impossible.



Specially design V Blender

Serious manufacturers will acquire the proper equipment to elaborate and fabricate their product. When mixing probiotics, special care must be taken to avoid generating heat during the mixing process. Ideally each lot must be analysed to confirm CFU concentration and purity (germ free).

In nature, birds and other animals find natural probiotics in the soil, bark or food source. In captivity natural probiotics are rarely found in the seed mixes and diets offered.

The addition of probiotics to your birds diet is a proactive decision to keep your pet or breeding colony healthy. Consult with your avian veterinarian for recommended manufacturers of high quality probiotics available in your area. Together, you can evaluate the quantities and frequency that should be offered.

The use of an avian specific probiotics is not only good for your birds' digestive and immune system. It is probably the only scientifically proven way to extend your parrot's life.

Gaétan Simard T.P. is a professional technician and works at Laval University in Québec. He has been keeping and breeding birds for many years. With the aids of microbiologists he elaborated and implemented a research protocol to test different strains of probiotic type bacteria on exotic birds. The goal was to create a product for exotic birds that could compare in effectiveness with the ones available for agriculture. Member of 'Entrepreneurat Laval', Mr. Simard likes to share his love for birds with other breeders and bird keepers. Promoting the proactive use of probiotics instead of antibiotics in the avian community is one of Mr. Simard's main motivation.

