

Pet Bird Nutrition

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Introduction

Keeping birds as pets in a cage or aviary may be more complex and somewhat different than imagined. Birds are actually an extremely hardy animal, but with improper care or poor nutrition they are more susceptible to disease and possibly death. In fact the number one 'disease' condition we see in pet birds is malnutrition which sets them up for secondary infections. It is not that the pet bird owner is knowingly feeding an inadequate diet, rather they are unfamiliar with the nutritional needs of pet birds. In order for birds to perform well, they need to be content in their environment. They require an untroubled life - no stress, no fear, no anxiety. With physical and mental health, a balanced diet and a pleasant environment, birds have the opportunity to reach their full potential as pets or breeding animals.

Pet Bird Nutrition

It makes good sense to feed your bird well. The only way its body can function at optimum levels is with proper daily nutrition.

I. Excellent nutrition is extremely important in birds

Choosing the proper diet may be one of the most important decisions an owner has to make for their bird. Birds manifest nutritional diseases more quickly than other animals due to their high metabolic rate. Because of their rapid metabolism nutritional requirements exceed those in other pets. Feeding only a seed diet is inadequate, as seeds are incomplete foods. Most seed mixtures are deficient in certain vitamins, minerals, amino acids (building blocks of protein) and high in fat. Only when eating balanced diets do birds have the opportunity for a long and healthy life.

II. Balanced diets for pet birds are now available

Years ago it was difficult to provide a balanced diet for pet birds due to the lack of nutritional research. Owners tried to provide variety and hoped the nutritional needs were met. Many pet bird owners and breeders fed their birds dog food or monkey biscuits in an effort to offer more nutrition. Beginning in the 1980s active research in pet bird nutrition was flourishing. The results of this research has given us a better understanding of their nutritional requirements along with the development of diets that meet them. These diets are manufactured commercially and have many advantages for birds and their owners.

Advantages of balanced diets for birds

They provide the maximum opportunity to have excellent health, be full of energy and live a long life. Balanced nutrition provides better tolerance to both physical and mental stress. Birds on a balanced diet will have better feather quality and molting takes place with less likelihood of complications (a poor diet can lead to abnormal feather coloration and prolonged molts). Breeding birds will give consistently high levels of performance on a nutritionally complete and balanced diet.

Advantages of balanced diets for bird owners

When feeding a balanced diet you have the confidence that your birds are getting a complete diet. Even the "picky-eater" bird gets a balanced diet, as there is no way to avoid eating it. Preventing dietary deficiencies and nutritional disease is good economy as poor health and sicknesses are expensive. Breeders on balanced diets have improved reproductive capabilities and the ability to maintain breeding

condition for longer periods. Some diets are impregnated with antibiotics and may be administered with ease during times of sickness eliminating handling while medicating.

Balanced diets are available in many forms:

A) Pellets, extruded diets, granules and crumbles

These contain nutrients uniformly ground, mixed and compressed. Advantages are that they are completely balanced diets, relatively inexpensive and have no waste as they are 100% edible.

B. Combination pellet/seed bars and cakes

These products (Nutriberries, Avicakes) are a mixture of seeds and pellets adhered tightly to each other. Because birds are attracted to seeds, these bars and cakes are readily accepted. The tight bonding between the pellets and seeds cause birds to eat both portions. The pellets have the added nutrition needed to cover the deficiencies in the seed. These products have all the advantages of a balanced diet plus are readily accepted (vision and taste), are a "work and chew" food (providing bird with 'natural' work), produce only a small amount of waste, can be used as transition food in the conversion process to pellets and are easily divided in portions so a specific amount can be fed (regulating diet in both content and volume).

III. Seed Diets for Birds

For many years seeds had been accepted as the proper food for birds. But if you think about it, birds in the wild would only be eating dried seeds in times of hardship; they would rather eat fresh succulent foods or insects, etc. Nonetheless, seed is the widely accepted diet so as a result many birds are being fed nutritionally deficient diets. Furthermore, the poor results obtained by feeding all seed diets have led to controversy.

Seeds can be part of an adequate diet when used properly. However, a solely seed diet leads to vitamin A deficiencies (due to its deficiency in seed), calcium deficiencies (high fat content in seed binds the calcium so it is unavailable nutritionally to the bird) and obesity (high fat content) to name a few. Thus seeds are not complete or balanced foods and need to be supplemented.

A loose mixture of seeds with other foods cannot qualify as a complete and balanced diet. Allowing a bird to select the food it desires "cafeteria style" from an assortment placed in its dish places the responsibility for eating the correct foods upon the bird. Birds cannot select a balanced diet in this fashion, as they will choose their favorites. They may eat only the seeds they prefer such as only peanuts or sunflower seeds or millet and no more.

Another consideration is that even when supplementing a seed diet many additives are powders and when sprinkled on the seed will sift to the bottom of the dish or else be lost when the bird hulls the seed. Therefore, additives should be placed in the drinking water or preferably mixed in the moist food that the bird will eat. Care must be taken as sometimes overzealous administration can lead to oversupplementation which could be as detrimental as deficiencies in the case of some nutrients.

It can be easily seen that commercially prepared balanced diets can ease these dietary shortcomings, however not all birds will accept the balanced diets and still prefer a seed mixture. Converting a bird to a balanced diet can be frustrating but should be attempted to provide the best nutrition. The conversion process is outlined in a later section. If your bird is unwilling to convert to a balanced diet and is a seed 'junkie,' proper supplementation and variety in the diet must be provided. Birds on commercial balanced diets do not need additional supplementation except in times of particular need.

The seed mix should be fresh such as the bagged variety in most pet stores. It should be free of any bugs, mold, dust or musty odor. Deal with quality pet stores and suppliers. Supplements required include:

A. Vitamin Supplements

There are a number of excellent avian vitamins available. Some vitamins are formulated for particular conditions or situations. Select a preparation made for birds and appropriate for the needs of your birds. Good general vitamins include Lafeber's, Nekton, Prime, Chirp, Vitaflite or Avitron to name a few. Read and follow the manufacturer's instructions closely. As vitamin A deficiencies are among the most common nutritional problems seen in pet birds additional sources of dietary vitamin A are recommended. Foods rich in vitamin A are red or orange vegetables, including carrots, sweet potatoes, dark yellow squash, papaya, red peppers, egg yolk, and dark green leafy vegetables such as spinach and broccoli.

B. Mineral Supplements

Seeds are seriously deficient in calcium and deficiencies in pet birds related to poor supplementation are common. Mineral supplements are needed daily in the diet. Mineral supplementation is especially important in birds that are laying eggs as a deficiency can lead to egg binding. Sources of minerals include: cuttlebone, mineral block, crushed egg shells (boil well to prevent Salmonella bacteria), crushed oyster shells, milk/cheese, bones/bonemeal and commercial preparations (Avimin, Osteoform, Neocalglucon)

C. Protein Supplements

Supplementation with proteins of animal origin can compensate effectively for the deficiencies of seeds. Pet birds can be fed such foods as meat, fish, cheese, milk and eggs. Birds can digest these foods well but do not feed any particular food to excess.

D. Liquids

Water is essential to life. Although a bird may not appear to drink much water without a fresh clean source it could not survive. The water bowls should be cleaned thoroughly **DAILY** to prevent the build-up of bacterial contaminants. Chlorinated water in cities will not harm birds. Some birds have a real fondness for nectar, tea, coffee, juices and milk. None of these in moderate amounts will harm a bird.

IV. Feeding Your Bird Table Foods

As discussed earlier feeding a bird table foods can be a valuable nutritional supplement. In addition, the sharing of food between people and their pets seems only natural. Sharing food can help build a stronger bond between the bird and owner. It can also be a source of good food and a happy experience for the bird. No one will question a bird's ability to taste and smell food after they have observed them eating table food. Taste preferences are obviously displayed and choices are made. Although not universal, birds seem to prefer eggs, sharp cheese, spicy spaghetti sauces, poultry, sweet grapes and other fruits. Some birds will even show excitement when they smell their favorite foods cooking in the kitchen.

The question immediately arises as to which foods are harmful to birds. The answer is simple; birds can eat almost any wholesome food. Pet birds are omnivorous and can digest most table foods well, so they can eat the same foods found on our table. Some precautions must be taken. The digestive tract of birds is designed to handle compact, concentrated foods. Bulky or high fiber foods overload the system, are poorly digested and indirectly deprive the bird of nutrients. Foods in this group include greens, fruits and raw vegetables. Small amounts do no harm, but volumes in the basic diet of 10-15% or more could cause problems. Care must be taken with fatty foods. Birds fed diets high in fats tend to be overweight, may have oily feathers and a liver that is enlarged and infiltrated with fat. Caution must be exerted when feeding foods with high cholesterol content. As birds are long-lived high levels of cholesterol for

prolonged periods can lead to hardening of the arteries, just like with people. Avocados have been shown to be toxic for birds and chocolate intake should be avoided due to potential toxic reaction.

It should also be noted that a bird eating table foods will tend to have more watery droppings due to the higher water content in the table foods compared to seed. Also the dropping color may change depending upon the type or color of the table food eaten.

Many birds are on all table food diets and most of them do exceptionally well for a year or two. Then, the bird begins to choose its own diet. That is, the bird indirectly coerces the owner to feed the food it enjoys and avoids all the others. Most of the time a diet high in fruit and raw vegetables results. The bird is happy, looks good and all seems well. However, at the next annual physical, the veterinarian performs routine blood tests and the plasma proteins are found to be low. While not yet a clinical problem, the diet should be corrected before problems occur.

Pets, in general, when not fed nutritionally balanced diets bring problems upon themselves. They cannot regulate their intake properly. Table foods should be treated as an adjunct to a well- balanced diet. They add interest, flavor and a freshness not found in prepared foods. Nutritionally, table food is an asset. The ideal diet for pet birds? Our conclusion is that birds are best off eating 80% of their diet as a commercial balanced food and 20% 'people foods' including bakery goods, cereals, pasta, nuts, fruits, greens, vegetables, meats, fish or dairy products. This allows the bird to receive the benefits of a balanced diet and the enjoyment of sharing our food.

V. Grit

Grit is controversial. Most wild birds find grit essential to their diet. However, those pet birds that hull their seeds can digest their food without grit in the gizzard. Even though grit is not essential in their diet, they seem to want some. Birds on deficient diets when trying to find nutrients lacking in their diet will often overeat grit. Birds with gastrointestinal upsets may tend to overeat grit. Excessive grit can irritate and even obstruct the digestive tract. Therefore we recommend grit only periodically (there are better sources of minerals) and removal if the bird is eating excessive amounts. Increased intake could indicate an underlying problem.

VI. Feeding procedures

A. Free-choice (cafeteria style)

Food is left in the cage all day long. The bird can then select the particular food it prefers. The disadvantage is that birds may select only one type of seed or table food leading to nutritional deficiencies in the long run. The problem is non-existent if the bird is fed balanced types of diets, either commercial or through the ingestion of a wide variety of foods and supplements.

B. Two meals a day

Feeding a bird two meals a day with nothing inbetween, except for an occasional treat, has many advantages for the bird and owner. Contrary to established thinking, birds do not "starve to death" when fed two meals a day. In fact, the degree of hunger brought about by two feedings is only sufficient to develop a hearty appetite. While eating only in the morning and evening appears unnatural, the converse is true. Most members of the parrot family fill their crops in the early morning to avoid food gathering in the heat of the tropical day, and not again until the evening for the overnight fast.

A definite mealtime and eating schedule causes the bird to anticipate eating, it will eat heartily and reduce wasting of food. The hungry bird considers the person bringing food a friend. A bond of

friendship develops as the bird associates the owner with the pleasure of feeding. A hungry bird soon learns to accept handfed treats between meals. The bird now becomes a pampered pet with best care. Because the owner is present when the bird is eating, they begin to observe what, how much and in what manner the bird eats. A watchful owner will quickly recognize any deviation from normal and seek veterinary care before problems begin.

This feeding program can be useful in training and developing a reward system. Like other animals, birds respond to rewards. About the only type of reward a bird understands is food, and then, only if hungry. If the hunger is combined with food in a training program, the results can be positive. Favorite foods can be withheld and used as an added incentive. When used as a response to talking and tricks, the food reward system is the best means of training. It should also be noted that as the relationship with your bird develops, a display of affection such as a caress may suffice as a reward.

VII. Conversion to a balanced diet

Many birds have developed poor eating habits, and as a result have or are bordering on malnutrition. It may be difficult to overcome these bad habits, but persistence usually pays off. Do not try to starve your bird into eating new foods. A small bird will deteriorate and may die in 48 hours if it does not eat. Trying to get a bird to eat a balanced diet is one of our most important concerns. Because birds naturally resist change and are reluctant to try foods that appear different than what they are used to, the conversion process can be frustrating. By using Nature's example as to the proper feeding times and allowing a natural hunger to develop, a keen appetite will result. The moderate hunger sends a message that food is needed for survival. As a result, the bird is nudged to break out of the "picky-eater" habit and eat the balanced diet presented. Even with this technique, it may take weeks or months to broaden a bird's diet (some may never convert), but the results are well worth the effort.

The conversion process

Discontinue cafeteria feeding and feed at mealtime. Begin by feeding at first three and then two meals a day. The length of the meal period will vary depending upon the desired result. Generally, one hour in the morning and one hour in the evening will do. If weight loss is the goal, especially with obese parakeets, fifteen-minute meal times may be required.

Introduce small amounts of the new food, be it the balanced diet forms discussed earlier, such as the pellets, or table foods. Leave it in the cage between feeding periods as the hunger developed with the twice daily feedings will make the bird more likely to try these foods. Another consideration is to offer these foods before the start of the usual meal period, either first thing in the morning or evening, as the hunger may make the bird less discriminating with new foods. Try feeding outside the cage. It is a valuable training tool during initial taming as, due to hunger, the fearful bird may overcome its apprehension and come outside the cage to feed. When this is accomplished foods can be offered from the hand and a bond of friendship is cemented. Also the friendly bird will be more likely to try new food given this way.

When you begin the conversion to a balanced diet mix small amounts of the new food with the regular diet. It is especially preferred with conversion to pellets. Initially mix 25% pellets with the usual morning and evening meal. It may be helpful to keep pellets in the cage between mealtimes and in that way it can be determined if the bird is trying pellets on its own. Try this for a period of time (usually a week) and when you are comfortable that the bird is taking in some of the pellets go on to the next step. The next step is to include 50% pellets in the mixture and when this phase is complete, increase to 75% pellets. The final step is when pellets are exclusively fed at mealtimes. When finally converted you can maintain

the preferred ratio of 80% pellets and 20% people foods. Additional supplements are not needed on such a diet unless certain conditions dictate it, such as during breeding season or other times of stress.

It is of utmost importance to monitor the bird's condition during the conversion to a new diet as it is a time of extreme stress. You must also be a careful observer to determine whether or not the bird is taking in the new food, for if the percentage of a food the bird is not really eating is increased, it can lead to starvation. Watch the activity level, number and character of the droppings. A bird that has become quieter than normal or is spending excessive periods of time sitting ruffled up during the conversion process may not be getting enough to eat. The dropping number should indicate how much food is being consumed. A normal parakeet (for example) should have greater than 30 to 40 droppings daily. A decrease in the usual number during conversion could mean potential problems.

If the droppings change appearance it could indicate poor intake of food. The droppings should have normal shape and bulk. Droppings that are flat or with little fecal portion are indicative of lack of eating. However, some color change in the droppings may be normal. Pellets change the droppings to brown. Particular foods may cause color change; strawberries-red, concord grapes-purple, etc. Also remember, the droppings will become more watery as table foods are taken in the diet. If problems develop during conversion, revert to the previous step. PATIENCE is the key to success.

VIII. Conclusion

One of the most important decisions you will make pertaining to the care of your bird is what you will feed it. If a bird is on an all seed, high fat diet it may not be able to achieve a good level of health and longevity. A bird that is on exclusively people food is also at risk. We have seen numerous birds that are overweight with greasy feathers due to eating a high fat people food diet. Birds can suffer from hardening of the arteries just like people. Birds that are eating all fruits and vegetables are not receiving a balanced diet. To be sure your bird is on the best plane of nutrition provide it with a balanced diet such as pellets. This way you can be sure that all the nutritional needs are met. If your bird absolutely refuses to eat such a diet then you must try to broaden the diet and provide adequate supplements to make up for the shortcomings. Remember that the number one disease condition that we see in pet birds is malnutrition. Do not let your bird fall into that category.