



Avian Nutrition

SEED DIETS INADEQUATE FOR BIRDS

While seed based diets have been the traditional diet for pet birds, so has short lifespans, frequent infections, and poor health. Birds that consume seed based diets almost always exhibit signs of nutritional deficiencies. Seed diets are deficient in 20-25 nutrients. Even so-called complete seed diets do not work very well. Birds will select what looks and tastes best, not what is good for them. In addition, most owners feed an unlimited amount of these mixes, so the bird never consumes the "nutritious" portion of the diet.

Aren't seeds the natural diet? Only superficially. Seeds are only available during certain seasons. Wild and domestic

seed crops are nutritionally different. Also, wild birds consume seeds at various stages of development. Parents teach their young how to find the proper food to eat to get the most nutritious value. Seeds are relatively high in calories. Wild birds work hard for a living and need those extra calories. While, pet birds are relatively inactive and obesity is common.



Some owners feel they can correct a seed diet by feeding vegetables and other foods. Vegetables and fruits are 85-95% water. Even relatively

large amounts of vegetables make little overall alteration in the nutritional content of the diet.

Table foods vary in value to your bird. Many are so high in water content that they amount to a very small part of the diet. Some are potentially dangerous. One potato chip is analogous to a whole bag for a human.

Vitamin supplements are a poor way to improve the diet. They lose potency in water and are not consumed if sprinkled on dry seed. Supplements in the water can also promote bacterial growth. It is almost impossible to accurately dose these supplements.

FORMULATED DIETS

Formulated diets combine all of the necessary nutrients in a dry pellet. Although the research available in avian nutrition is not complete, many of the commercial formulated diets are very high quality feeds that provide all of the known requirements for



psittacine birds. While they are considered complete diets, avian nutrition lags behind canine nutrition. There are few controls on formulation of bird diets. Ask your veterinarian about what brands are currently recommended. We suggest that formulated

diets be used as the base (50-75%) of the diet and that the remainder of the diet be composed of the other food groups described below.



GRAINS AND NUTS

Grain products are the main source of carbohydrates for seed eating birds. They are a good source of calories, B vitamins, and fatty acids. They have some protein but the quality of this protein is poor. Grains are generally low in vitamin A, vitamin D, calcium, certain amino acids, and many trace minerals. Oil seeds, such as sunflower and safflower, and most nuts are very high in fats.

This can be a big problem for some birds.

Many whole grain products are preferable to seeds, since birds often discard seed shells, which contain much of the nutrition.



Grains and nuts should make up about 0-25% of the diet.

This includes all the seeds, cereals, breads, pastas, and baked goods that the bird eats. The amount should be discussed with your veterinarian.

Birds that are thin, or that are exposed to cold may require the extra fats of oil seeds while overweight birds may require elimination of this component of the diet.

VEGETABLES AND FRUITS

Some of the deficiencies of grains can be balanced out by vegetables. Dark green vegetables (broccoli, spinach, mustard greens, dandelions, Brussels sprouts) are good sources of vitamin A, B vitamins, calcium, and trace minerals. Legumes, such as beans, peas, lentils, alfalfa sprouts, and clover leaf, are excellent sources of protein. In addition, legume proteins

improve the quality of grain proteins by providing the missing amino acids. Vegetables with yellow or orange color such as carrots, sweet potato, corn, or squash, are excellent sources of vitamin A. All of these are good sources of fiber. Vegetables should make up about 25% of the diet.

Fruits generally are overrated as far as nutrition goes. Most provide little of the nutrients that birds lack. They often are relished as a treat, however. Fruits can provide up to 5% of the diet. Try to select those with darker flesh. Avoid the parts of fruits around the pits.



BIRDIE CASSEROLE

One recipe that simplifies the combination of grains and vegetables has been used for many years. Mix two parts cooked brown rice, one part cooked beans, and one part chopped green and orange vegetables.

This mixture can be pressed into ice cube trays and frozen.

Each day an appropriate number of "bird cubes" are thawed and mixed 50/50 with pellets to make up the total diet.

Instant oats and canned beans can be substituted for rice and dried beans. Also, other cereals and pasta can be used in place of some of the rice for variety.

Some similar diets can be bought as a dry mix and cooked.

All of these diets are perishable and should not be left out for longer than a few hours. It is best to give a small amount, that your bird can finish quickly, and then give more later.

SUPPLEMENTS

Supplemental vitamins and minerals are not needed by birds that are on a balanced diet. Formulated diets have already been supplemented with all of the known nutrients, in what is thought to be the appropriate amounts. Birds that actually consume their formulated diets require no additional supplements.



Birds exhibiting signs of deficiencies, and those which have not yet been converted to a healthy diet may benefit from supplements. Supplements are best added to fresh foods since they will only sift to the bottom of a dish of seeds.

Supplements added to the drinking water will promote bacterial growth in the water and may discourage some birds from drinking. Unfortunately, most vitamins lose potency quickly in the water. Ask your veterinarian for recommendations based on the needs of your bird.

DIET CONVERSION

This is the tough part! Your bird will be resistant when you put this new stuff in front of him. Conversion of the diet requires patience, persistence, and vigilance. It is essential you use **caution** during this process. You can literally starve your bird to death if he/she does not eat. It is highly recommended having a thorough physical exam and consulting with your veterinarian before starting a diet conversion for your bird.



One simple method is to first convert to all pellets and then add other items from there. Take all food from the bird overnight. In the morning place fill the dish with only the formulated diet. Leave this for

1 hour, and then replace with familiar food. After 2 week, leave the new diet 2 hours, then 3, etc. Eventually, the formulated diet is left in all day.

The other method utilizes the Birdie Casserole. First, determine the amount of seeds your bird eats. The formulated diet is mixed with the Birdie Casserole and one day supply of seeds. Everything sticks together, so your bird will accidentally eat some new food. After a week, reduce the seeds 10%. Reduce 10% again every 2 weeks. Eventually, the seeds can be eliminated from the diet.



Monitor your bird closely. If at any point, the bird looks weak, sick or has other problems, back off of the diet conversion, and have them seen by a veterinarian. The diet conversion can be resumed once everything is back to normal.

Also monitor the droppings on a daily basis. If the droppings change such that there is fewer feces (the dark part) and more urates (the white chalky part) your bird may not be eating enough. Back up on the diet plan by a week or two and start again.

Converting a bird to a new diet can be cumbersome, but in the end, your bird will be healthier.

FOODS TO AVOID

While most foods in moderation are safe for pet birds, certain things should always be avoided.



such as peaches. These fruits can be given, but the part close to the pit should be trimmed away.

Avocados have a toxin that appears to affect birds more than any other animal. The toxin is most potent near the pit, but birds are sensitive enough for the whole fruit to be toxic. A similar toxin is in some other fruits that have large pits,

Chocolate contains a strong stimulant called theobromine. Humans are relatively tolerant of this toxin, but most other animals are not!

Avoid excessively *hot* foods and beverages. Crop burns occur

easily in birds. Microwaving food often leads to hot spots. Stir foods that have been warmed in a microwave.

Greasy, salty, and sugary foods are not good for us and they are not good for our birds. If they are given at all, it should be in very limited amounts. One potato chip is analogous to a whole bag of chips for a person.

FINAL NOTES AND TIPS

Nutrition can make a bigger difference in the health of a bird than any other single factor. Diet conversion can be challenging but the end result is a healthier and more vibrant bird.

- Eating is a very social event for birds. If your bird wants to eat at the table, give him a dish of his own food or a small amount of some healthy food from the table.

- Clients often ask what they can add to improve the diet. Unfortunately, they have the math wrong. They should subtract to make the diet better. Birds that are offered too many things rarely choose a healthy diet.

- When traveling, give fresh fruits and vegetables to provide extra water. Water dishes spill easily and dehydration is one of the major stresses of travel.

- Feeding some type of soft treat such as yogurt or custard on a regular basis can make medicating sick birds easier. The medicine can be mixed with a small amount of the treat and fed on a spoon.

- When you improve the diet, the feathers and skin may begin to look worse for a while before it improves. The skin is trying to slough the old to build the new.

