

Birds

Many volumes could be filled with what has been written on bird nutrition. Unfortunately, these are rarely based on sound scientific research. The sad truth is that nobody knows exactly what constitutes a complete diet for many bird species. This is compounded by the diverse nature of the birds, in that there are differences among species both in behavior and their natural history. It is probably truthful to say that they don't all have the same requirements.

There are many other factors that influence avian nutrition in captivity, including maintenance in a foreign climate, breeding status vs. pet and other environmental stresses.

Three facts are true about the nutrition of the parrots particularly:

1. None of these birds would, in the wild, eat a diet of high oil seeds (sunflower, safflower, peanuts, etc.).
2. The use of oil seeds as the foundation of a bird's diet leads to nutritional deficiencies and eventually death.
3. The birds that live to be aged eat a wide variety of foods, often eating from the table with their owners.

There is nothing particularly lethal about these seeds, nor is any one type better or worse than another type. Simply, these seeds are inadequate in their nutrition to supply the bird's needs. If there is a problem with them it is that they have a nutritional value similar to a chocolate bar. Think about the last time you purchased cooking oil, the choices you had were sunflower, safflower, corn canola (rape seed oil), peanut, etc. Now visualize the "deluxe parrot mix" you just purchased. They're the same types of seed! While it might be true that birds have access to and eat seed in the wild, the difference are enormous. Those seeds would be growing, and more importantly would be available only at certain times of the year, and are often the seed fruit of leguminous trees, palm fruits and nuts.

Furthermore, supplementation will not fix a bad diet and probably is not needed if you have a good diet. Vitamins can be used to fix a short term problem, and there are times when high levels of a vitamin are beneficial, but remember, if you're eating nothing but chocolate bars every day, a vitamin tablet is not going to make your diet complete.

Recognizing that we can never hope to provide our birds with all the things that would be available to them in their natural habitat (mostly because we don't live in the rain forest), it then becomes obvious that offering a variety of healthy foods in amounts that are reasonably balanced is the best solution. It is also important to remember that whatever we choose must be easy and convenient, because if it is too complicated or time consuming it might be difficult to continue doing it. After all, dishing up seeds is pretty easy. Therefore, you must find a system that works for you.

Providing a Balanced Diet

No single diet by itself can provide total nutrition for a pet bird, and as mentioned, variety is the key to success. The following are examples of what can be fed from various food groups and a discussion of commercially made bird diets.

Commercial Bird Diets

These diets are becoming more acceptable as the staple diet for a variety of species of birds from canaries to toucans to macaws, and they are very convenient for owners. There are a wide variety of types on the market from granules to colored pellets. They are particularly useful for overweight birds that need to go on a diet! Some commercial diets claim to be complete, but this is rarely the case. Although these diets have proven to be extremely useful in correcting nutritional problems in many species of birds, we do not recommend that this be the only diet that is fed. Not only is it important to provide a little variety to insure all the dietary requirements are

met, but remember that birds, especially hook bills, or psittacines, are extremely intelligent and in the wild they would spend a large portion of their day searching for and obtaining their food items. When we provide them with a dry diet that is exactly the same every day, they can become bored with their food and develop such behaviors as overeating, feather picking and tearing up their surroundings (more than usual!). It is good to still provide them with “fun foods” to play with such as corn on the cob, leafy greens, broccoli, oranges and pizza just to name a few. Let your bird buddy share your meals.

Some birds have starved to death when converted too quickly to a commercial diet. Follow the manufacturer’s instructions and change the cage papers daily to monitor the number of droppings being produced. If the number is decreased, or there is only water (urine) being passed for more than 24 hours, then return the bird to its former diet and consult your veterinarian.

In summary, we would recommend the commercial bird diets as a replacement for seed and vitamin supplementation (vitamins are already built into the pellets), but would advise you to continue giving a variety of fresh foods daily (or at least 3 times a week minimum). Check with your veterinarian for suggestions as to what brand(s) to try. The description of the rest of the food groups below contain percentages that refer to an all natural diet that does not contain a significant amount of commercial bird diet.

Fruits and Vegetables

These foods should be given twice daily and constitute 20-25% of the bird’s diet. They are an excellent source of carbohydrates and many essential vitamins and minerals. Some examples of good vegetables are corn, carrots, potatoes, squash, dark green leafy vegetables, broccoli, cooked sweet potatoes, etc. Examples of fruits are apples, melons, oranges, berries, bananas, pears, peaches, etc.

The juicier fruits often cause more voluminous soft stools with excess water (urine) when fed in large quantities. This is not a health problem. Fruit juices may also be offered. Anything fruit or vegetable that is safe for human consumption may be tried. Of course, make sure that all these items are washed thoroughly prior to use. Using a powdered fruit preservative such as “Fruit Fresh” sprinkled on the fruit will allow you to store several days’ worth in the refrigerator without spoilage and it is completely harmless.

Breads and Cereals

This component should constitute 10-15% of the bird’s diet and should be given 2 times a day. They are an excellent source of certain amino acids, carbohydrates and B vitamins. Good sources include whole grain breads, unsweetened breakfast cereals, granola, tortillas and pasta.

Protein

High protein foods should make up about 10% of the bird’s diet and are given 2 times daily. These items can spoil quickly so they shouldn’t be left in the cage for too long, especially on warm days. Examples of protein rich foods are cooked lean meats, tofu, low fat cottage cheese, other firm, light colored cheese, yogurt and cooked eggs. If your bird is experiencing a problem with obesity, then eggs and cheese should be left out.

Seed Mixes

No more than 20-25% of the bird’s diet should be in the form of seeds. Try to severely limit oil seeds such as sunflower, safflower and peanut. It might be best to use these as hand fed special treat foods. (For example, a medium sized parrot like an Amazon might get only 10-15 of these seeds a day.) Grain seeds such as millet, canary seed, corn, wheat, brown rice and oats can be left in small amounts in the cage. Seeds provide carbohydrates and some B vitamins.

Vitamin and Mineral Supplementation

If you are feeding a variety of foods, it is generally not necessary to use much vitamin supplementation. Use a powdered supplement and lightly “salt” the soft food once a day. If you are using a commercially prepared diet as more than 50% of the bird’s diet, then do NOT add any vitamins unless recommended by your veterinarian for any special disease processes.

Liquid vitamins added to the water are not recommended for several reasons. Many species of birds drink very little water and thus would drink only a very small amount of the supplement in the water (some birds may even refuse to drink the water altogether). Liquid vitamins quickly lose their potency once in the water bowl and therefore are no longer effective. Finally, they lead to fouling of the water and establish a bacterial breeding ground in the water bowl if not changed frequently.

Calcium is a very important mineral, especially for the African Grey and egg-laying cockatiel. For this reason, further supplementation must be given beyond the powdered vitamin/mineral. Calcium may be provided in the form of a cuttlebone (soft side toward the bird). White oyster shell or mineral blocks. Other, more potent products are available through your veterinarian should your pet require extra supplementation.

Water

Fresh water should be provided and changed at least once a day. Water cups should be thoroughly cleaned each day. Depending on the water quality in your area, you may consider the use of bottled water for your pet.

After reading all of this, you may be thinking, “Hey, my bird can eat many of the same foods that I do!” This is true as long as what you eat is considered healthy for you. Allowing your pet to share regular meals with you provides an excellent way to strengthen the human/animal bond and make your pet a real part of the family. But in doing so, please keep the following rules in mind.

Rules for Feeding Table Foods:

1. Nothing greasy, salty or sugary
2. No caffeine or alcohol
3. Stick with “health food” type diet
4. Give a wide variety of foods
5. Introduce new foods gradually
6. Do not leave fresh food in the cage for more than 4 hours (especially high protein foods), then remove and clean the dishes for the next meal
7. Remove all food from the cage in the evening
8. Wash food and water dishes daily

Home-made Prepared Diets

Corn Bread Mix

This is a method of sneaking new food items into your pet's diet. Start with a standard boxed corn bread mix and when adding the egg, also crush up and add the shell (for calcium). In addition, add a few tablespoons of grated or chopped vegetables, sprouts, dried fruits and so forth. Your imagination is the limit as to the variety and combination of food added. Bake the bread, cool, cut into small pieces that the bird can handle and refrigerate. This will keep in the fridge for 4-5 days. Leftovers in the dish will dry up and you don't have to worry about rapid spoilage.

Bird Bread

Stir together 4 cups of one of the following: whole wheat flour, graham flour, muffin mix, etc. with 2/3 cup brown sugar, 4 eggs (and the crushed shells), 1 cup ripe banana, 1/2 cup chunky peanut butter, 1/2 cup total mix of raisins, currants, coconut, shredded carrots, apples or zucchini, 2 tablespoons baking powder, 1 teaspoon nutmeg, 1 teaspoon cinnamon and 1 cup milk. Stir together, adding enough milk to make a thick batter, depending on whether you make a loaf or muffins. (Add less milk for muffins.) Place into greased pans (1 loaf pan or 1-9" cake pan) or paper lined muffin cups. Bake at 350°F until bread springs back when touched lightly and browned on top.

Kray Diet (Corn, Rice, Bean and Dog Food)

Dr. Raymond Kray published a diet that is nutritionally balanced for most animals. This diet consisted of equal portions of corn, cooked pinto beans, brown rice and dry dog food. Dr. Kray also recommends a daily serving of fresh vegetables, fruits and a vitamin supplement. This diet is convenient, in that it may be prepared in large amounts, divided into daily servings and frozen. Prior to feeding, daily servings are thawed in a microwave or in a bowl of hot water. You may easily modify this diet without significantly changing its nutritional value. The corn can be replaced with a variety of vegetables (frozen work great); there are several varieties of beans that may be used; carbohydrate (bread, pasta, tortilla slices, etc.) can be substituted for the rice; and bird type pellets or even cooked meat can be substituted for dog food. Using this approach it is easy to develop hundreds of variations of the Kray diet, so your friend need never be bored.

Below are some variations on the Kray diet. Mix bite sized pieces together in proportions of 1lb per category by weight, then divide into daily servings and freeze in zip lock bags. Use 1lb of beans (dry weight) soak for two hours, then cook until just done, not mushy. The vegetables can be purchased and added to your mix frozen (don't cook them). The items listed below are suggestions. You can use them all, or pick one from each category, and even add your own ideas.

Holiday Kray

Small white and red beans (soaked and cooked)
Stuffing flavored bread cubes
Dog food or cooked turkey
Yams or fresh cranberries or squash

Mexican Kray

Pinto beans and black beans (soaked and cooked)

Corn or flour tortillas cut into pieces

Dog food or cooked hamburger

Corn or green pepper or onion or mild corn or green peas or bell pepper or chilies (canned are fine)

Italian Kray

Kidney beans or lima beans (soaked and cooked or canned or frozen)

Cooked pasta (small variety such as tortellini, orzo or small shells)

Cut green beans or corn or tomatoes

Dog food or pepperoni or Italian sausage (sliced into small pieces)

Fourth of July Kray

1lb can pork and beans or baked beans

Dried bread cubes (plain) or cooked salad macaroni

Dog food or chopped hot dogs

We would like to thank Dr. Jeffrey Jenkins of the Avian and Exotic Animal Hospital of San Diego, California for allowing us to adapt portions of his handout on avian Nutrition to use in this writing.

Sexing

Sexing Birds

It is difficult to accurately determine the sex of some species of birds due to the fact that both male and female birds may have the same outward appearance. In addition, there are no external sex organs. In the past, the only way to definitely determine the sex of a bird was by surgical sexing which involves anesthesia and an incision into the abdomen to visualize the sex organs.

Now, blood cell DNA analysis provides a safe and accurate alternative to surgical sexing. A small amount of blood is drawn from your pet and sent to the laboratory and the sex is determined by analyzing the sex chromosomes in the blood cells. You will receive a certificate from the laboratory that states what the results of the test were. The test is 99.9% accurate.

In addition to the DNA sexing, you also have the option of joining the GeneMatch Registry through the Zoogen Laboratory for an additional fee at the time the blood is sent in. This means that the blood is stored permanently in two locations under carefully controlled conditions so that it can be used in the event that the DNA is ever needed for a DNA "fingerprint". The DNA fingerprint can be used to confirm the identity of the bird if it is lost or stolen and then recovered. The fingerprint can also be used to assess the bird's degree of relatedness to other birds, allowing you to prove that the bird was domestically bred (provided that the parental birds are available for sampling). You can also use this information in breeding programs, to prevent the pairing of related birds.

The charge for the DNA sexing is \$56.00 and can be done easily on an outpatient visit with a small blood sample. The charge for the GeneMatch Registry is \$30.00. Now the answer is available safely and easily to that question you've always wanted to know... is it a boy or girl?