

In Fall 1997, at only 2 years old, a cockatoo of mine was diagnosed with a kidney density. I began to research food and nutrition with a renewed interest that I have had since the 1960's and 70's. In my research and through my flock and others' flocks, I have focused not only on nutrition but on the medicinal value of food. Living with parrots, whether they are completely well or are those that have health and nutritional illnesses and/or deficiencies inspires me to continue to research and learn more about the healing properties of food. I also developed a strong interest in herbs after chatting and consulting with the late Alicia McWatters. Alicia not only helped my parrots and me, but she was a teacher for me and so many others. This column is dedicated to her memory and to the parrots that have the gift to be one of nature's most sublime teachers if I only remember to listen, look and learn.

I hope that you and your flock enjoy the information, photographs, and new grocery lists presented here and that you'll share your comments and stories with us. Welcome to the first edition of our monthly BIO-Food Nutrition Column.

— *Shauna Roberts*

***If you have questions or comments for Shauna, please email her at [shauna@thegabrielfoundation.org](mailto:shauna@thegabrielfoundation.org). Thanks for reading.***

### **Too Little of This OR Too Much Of That**

Like us, parrots require a well-rounded nutritional diet in order to be healthy and continue to remain so. This is often accomplished by feeding a variety of foods which may include as part of the diet: pellets, veggies, greens, grains, legumes, fruit, sprouts, seed, nuts, essential fatty acids and perhaps supplements. If feeding a mostly fresh food diet, you can add about 1%-2% green food supplements such as alfalfa, kelp and or wheat grass; however, if you feed mostly pellets, always keep in mind that most of these manufactured diets are synthetically supplemented so it's best not to add additional supplementation to the bird's diet.

Food variety and proportions are what often seem to be unclear and the results can be malnutrition, illness or in some cases death. I don't want to make your bird's eating or feeding extremely difficult, but I want each of you to think about what is offered by using a bird-sized common sense approach to food quantity and proportions. For example, if the only vegetables offered to a parrot are corn and peas (high sugar), and the diet is mostly fresh foods, the chances are very high that healthy nutritional requirements are not being met for that parrot. If a favorite food of a 650g parrot is banana, and that parrot is

given 1/2 of a banana daily, there is another good chance that all of the bird's nutritional needs are not being met. In rare cases, if a food is offered in amounts of extreme excess, serious problems could result immediately. Most of the time however, when a diet is not balanced, and does not offer completely rounded nutritional support, the bird's health problems may not be apparent for several years. Then health problems such as heart failure, poor liver health, kidney ailments, feather plucking and many more may manifest due to years of poor nutrition.

So, what's the big deal about that 650g parrot eating his 1/2 banana? Let's picture a 150 lb. adult human who enjoys bananas, and eats one or even two daily. What do we have? A 150 lb. person eating 1-2 bananas vs. a 650g (approximately 1.5 lbs.) eating 1/2 of a banana. For the person, the banana is a snack, or maybe just part of a meal. For the parrot, 1/2 banana, by its weight alone, is more than one meal, but lacks the total nutritional value that a more varied meal offers. An approximately 1/4" slice or maybe even two of the banana would be a much more appropriate offering and will help to keep the bird's diet balanced because other nutritionally dense foods will be eaten too. For an even smaller parrot weighing up to 250g, 1/2 slice of banana may be enough.

Does your parrot "love" corn? Mine birds certainly do, but because they enjoy it so much I offer it as an occasional "dessert", after a varied meal (grains, legumes, veggies, greens, sprouts, fruit, efa's, green supplements and pellets) has been eaten. Even then, they only get some freshly sliced corn kernels or a round wheel cut from a cob! Many parrots enjoy grapes, but even 4 or 5 grapes are too many! Depending on the size of your bird, offer just 1 or 2 grapes, or even cut a grape in half or quarters for the smaller guys. The timing of when a particular food is offered can also make things easier for you and more satisfying and nutritious for your parrot. Favorite goodies such as grapes can be a wonderful treat or dessert, rather than keeping them just a part of a meal. Cut them into small, treat size portions for healthy positive reinforcement goodies.

It was recently brought to my attention that Star fruit (Carambola) may not be a good choice for us or our parrots because of toxins it contains. For anyone suffering from kidney ailments, Star fruit should most certainly be avoided because the toxins for those persons may prove to be life threatening. Star fruit contains toxins including a powerful neurotoxin that has been shown to build up high levels in

humans which may cause irreversible damage. For further information, go to:

<http://www.ikidney.com/iKidney/Lifestyles/WarningStarfruitIsTobeAvoided.htm>

Garlic, a member of the onion family, is an absolutely wonderful herb when used correctly and as only a small portion of the diet. It has been shown to be effective against some bacteria, some fungal disease and is also a good immune system builder/enhancer. However, it is also possible to ingest too much raw garlic. It's not known how much garlic could cause problems in birds but the toxic dosage for dogs and cats is any amount greater than .05% of the animal's body weight. I am aware of a parrot's death supposedly from garlic toxicosis, although only one case has been reported, resulting from unusually very high amounts of raw garlic that were in the parrot's digestive system 24 hours a day for several days. The dosage given was 12.5-25 times more than the toxic dosage by body weight for a dog or cat. A more appropriate amount to give a parrot for medicinal or immune support purposes may be approximately 1/2 clove (finely chopped) or less to a 1500g parrot. One can see that just a very small amount of some foods is needed to be effective and how easily the portions and amounts can possibly be overdone, especially if fed several times day, for many days. More does NOT mean better! Garlic may also be given in powder form or in kyolic form (aged garlic) and achieve the same health benefits.

Cooked eggplant, also known as aubergine, is OK to offer in small amounts and contains ample bioflavonoids. It may help to prevent heart disease and aid against cancer. It's important however that eggplant **ALWAYS** be cooked and never offered in its raw form. Eggplant belongs to the nightshade family and contains the toxin solanine, which is also a calcium inhibitor, and can cause gastrointestinal difficulties. The toxins in eggplant are found in the fruit before maturity and also in its leaves and stems. Cooking should eliminate or reduce chance of gastrointestinal upset.

### **It's Fall Harvest**

Did you know that pumpkins are a fruit? A very large fruit indeed! Some individual pumpkins when measured have exceeded a circumference of six feet and have weighed over 500 lbs. Talk about the Big Pumpkin! When serving cooked pumpkin with meals, we usually serve it as a vegetable. The orange color of the pumpkin flesh is from its high content of various carotenoids and beta-carotene. Vitamin C,

fiber and potassium are also benefits. Parrots enjoy pumpkin raw or cooked. The small pumpkins can even make great toys; just make sure to purchase from the produce department of your grocery store and do not purchase pumpkins that may have been treated for display-only purposes. If you feel creative, you may want to carve out a small pumpkin and hide some surprises inside for your parrot to find.

Don't forget to offer the pumpkin seeds which are good sources of protein, iron, B vitamins and vitamin E. They make yummy treats. Place seeds in a single layer on a lightly greased cookie sheet and bake at 250°F for about 30 minutes, turning a few times while baking. The seeds can be sprinkled with cayenne pepper, and/or garlic powder before baking. Pumpkin seeds contain the amino acid cucurbitin which is probably what makes them useful as a worm expellent. (definition of expellent-to expel, to force or drive out)

Winter squashes contain greater amounts of natural sugars, carbohydrates and beta-carotene than summer squashes.

I prefer to offer squash (or pumpkin which is a squash varietal) lightly steamed or roasted. Squash can be cubed and mixed in with mash type foods, along with other veggies and fruits. TIP: Once a squash is roasted or steamed, it's easy to peel. But if you want to peel a squash before cooking it, put the squash in your microwave and cook on high for 5 min. The squash should still be very firm but the peel should now be easy to remove.

Try mixing some pureed squash with grated carrots and a dash of ginger and cayenne, sprinkled with a few almond pieces and serve or modify the ingredients slightly and make a pie:

Pie: 1/2 cup grated carrots, 3/4 cup squash puree, 1/8 teasp. ginger, 1 egg, beaten. Mix all ingredients. Put in small lightly greased baking dish, sprinkle with almond pieces. Bake in a 350°F oven for 20-30 minutes, until done.

Mash some squash and add some scrambled egg, mix and serve. Add a few drops of orange or lemon juice (optional) Spread on a whole-wheat tortilla, roll up, and serve slices.

Pomegranate, another fall gem, is an old French word meaning, "seeded apple". Full of crimson colored seeds, they have a sweet and

sour flavor that is juicy, fun and interesting. They contain manganese which is needed for strong bones and also potassium which may help lower the risk of heart attack and stroke. Pomegranates also contain an abundance of ellagic acid which may work with other antioxidants to protect one from environmental toxins. Catechins found in pomegranates may defend against cancer and anthocyanins that protect against free radical cell damage are also found in this fruit. You can offer pomegranates so they can be torn apart, or if you don't want the potential mess, just mix some of the seeds into the bird's daily meal. Watch out though – the color is intense and can stain the carpet and walls!

I hope that you and your parrots enjoy the abundance of this fall's harvest of nutritious, delectable and colorful fruits and vegetables. Bon appetit!

–Shauna

1. Reference: Wade Laura, Newman Shelley, Hemoglobinuric Nephrosis and Hepatosplenic Erythrophagocytosis in a Dusky-headed Conure After Ingestion of Garlic :Journal of Avian Medicine and Surgery 18(3): 155-161, 2004