"My Views on Pelleted Food Diets"

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An internet discussion about processed food diets for psittacines has inspired me to give our convictions at The Perfect Parrot concerning this oft-debated subject. Though all extruded diets are not "pellets," I choose to use the two terms interchangeably here.

First of all, it must be understood that psittacines in the wilds evolved over millions of years eating strictly raw, green and live foods supplemented with minerals, clay, bark and other organics.

To presume in captivity that we humans, no matter our scientific expertise, do anything other than shallowly try to mimic the exacting, seasonally changing diets of wild parrot species, is naïve to say the least.

This being given, it is only logical that the further keepers distance themselves from raw and fresh bird diets, the more the exotic and necessary elements of nutrition present *only* in natural foods never processed, heated or dried, will be lacking for our pets and breeder psittacines (ie. those delicate enzymes, phytonutrients, etc.)

Years Utilizing Pellets

I would like to make it plain that I have been providing some extruded and pelleted diets to my birds for 15 years or so. A few of my flock eat them. A few do not. A few crunch them up and waste them; a few prefer them only when babies are in the nest.

But the amount of processed food I give my birds hovers around 5-10%. The rest of my diet is cooked, sprouted and raw food, greens and seeds offering the correct combinations of nutrients put there by Mother Nature, not the combinations formulated in the laboratory.

I had to smile at a letter written about processed diets, which said they take the guesswork out of parrot feeding. Pardon me, but I was feeding just such a diet many years ago when I worked with a large breeder who was doing product review for one of the companies making extruded food. One week a shipment of baby food came in with an unannounced factory switchover from rice based nutrition to corn based product (or was it the other way around?). Not only did the food smell different, but its consistency was different. This move played havoc with many breeders who were in the middle of a feeding period with baby macaws, greys, etc.

If you aviculturists and pet owners out there think the processed diet manufacturers are no longer guessing at perfecting the various formulas for captive psittacine nutrition, then you are deluding yourselves!

Last spring April and I picked up a four-year-old male Yellow Fronted Amazon Parrot for our colony. We were informed by the owner that this was a beautiful psittacine with an unusual red and yellow hue to his chest feathers—perhaps a new sort of mutation possibility, she said. We were also told "Buddy" was on a 100% pelleted diet, one of those multi- colored ones advertised in the magazines, and supplemented with fruits and vegetables. Well, when we got this bird home, his droppings were yellowish. Veterinarian checks indicated he was fine. We began feeding him an organic cooked

grain and pulse diet with great amounts of grated green vegetables and homegrown fruits. He ravenously devoured everything. Then within 60 days, Buddy's colored chest feathers began to fade away. No full molt, mind you. A year later they are gone. I believe he had been malnourished of the micro-ingredients present only in natural foods.

Not For Every Bird

One of the problems with feeding too much processed food in the domestic bird diet is that these foods are not formulated for every pet species. Show me a corporation which has done ten years of research on diets of Princess of Wales Parakeets or Golden Conures, or Hawkheaded Parrots or Yellow Collared Macaws or Solomon Island Eclectus or Cloncurry Parakeets or conures or capes or *Psittacula*, or....well, you get my drift. It is not possible to make a species specific diet unless you study precisely what that species is eating in the wilds. Pellets are a general food. Not only that but they take the choice of what the body needs away from the parrots. This is a very dangerous concept if you have birds with unusual nutritional needs or who are raising babies in the nest. Several years ago some processed diets were causing deadly iron storage disease in captive members of the Toucan family. Wrong lab formula I guess. I have talked to lorikeet breeders who were finding protein levels in processed lory diets too high for their breeder birds.

Dangers in Dryness

A classic problem with dry extruded diets is that they are extremely dessicating. That is, they change the natural drinking habits of our parrots. Keepers merely assume that their birds will drink enough extra water to make up for the dry ingredients, but this is not always so. Arid climate species who drink and bathe little, and inexperienced parent pairs who are feeding chicks in the nest, often do not increase their water intake enough to allow the pellets to moisten sufficiently. End result can be a dry crop mix, babies that grow slowly and beg less frequently. Worst case scenario is parents stop feeding the day one or day two chicks. (This is the time when fresh, moist and green food is critical to a clutch!) I once did a consultation with an aviculturist trying to breed dryland Australian parakeet species on 100% pellets! My gosh, I told him, these are *seed eating* species. Why would you put such a parrot type on a processed diet?

If you would like to do a little home test to see just how much water it takes to soften a teaspoon of pellets, put four to six times as much water by volume into a glass with them and observe what happens. When your pet bird carries his pellets over to the water dish and dunks them in, he is trying to tell you something!!! And think of the bacteria soup such water bowls can create...

According to Worden (1964), birds fed on dryer prey will often have better developed saliva glands. That suggests some serious considerations when jungle and rainforest psittacine species are subjected to dry diets in captivity.

A Bit of Pellet History

This brings up an interesting aspect of the bird food industry. In the 1980s when processed pelleted and extruded diets began to increasingly appear on pet and farm store shelves in all shapes and sizes, it was only logical that makers of these formulated bird foods would wish to compete against the large parrot seed manufacturers in order to secure a piece of this huge profitable dry diet pie. It made further sense to push pellets over seeds because from a balanced diet standpoint, many foolish birdkeepers had fallen into the lazy habit of feeding *exclusively* seed to their psittacines and hence were starving their birds of those nutrients not present in dry seeds.

Of course many expert aviculturists and zookeepers were wisely keeping their birds healthy by feeding green food, cooked food, egg food, mealworms, fruit, veggies and powdered vitamin/mineral supplements. Still with so many imported wild-trapped birds in the marketplace—Nanday Conures, Goffin's Cockatoos, Red-Tailed Greys, Blue and Gold Macaws, etc—who appeared to be too picky as eaters to accept anything other than seeds, unless forced, the stage was set.

Veterinarians who were consistently seeing malnourished and dull, lethargic and overweight birds eating nothing but seed joined the bandwagon and helped the pellet marketers with strongly-worded attacks. I am not saying this was bad; it just happened, and continues to this day. The net result was that dry bird seeds got a bad rap!

Make no mistake, psittacines are seed eaters. They eat guava seeds, passionfruit seeds, fig seeds, apple seeds, *Casuarina* seeds, eucalyptus seeds, papaya seeds, palm seeds, thistle, flower and grass seeds, corn rice and grain crop seeds, oak seeds, *Podocarpus* and *Pyrocantha* seeds, pine seeds, beech seeds, squash, cucumber and melon seeds, rape, bean, pea, lentil, buckwheat seeds, and hundreds more. Seeds are naturally-stored packages of live energy and they are prime reasons why so many parrots and parakeets have strong, durable hooked bills. Keepers of budgerigars, lovebirds, conures, rosellas, amazons, cockatoos, macaws and more are doing their birds a huge disservice by agreeing with the brainwash theory that seeds are bad for parrots.

Not only that, but seeds are interesting to crack. A real peeve with processed pellet diets is they are supremely boring. How would you like to eat dry corn flakes every meal, every day, your whole life? Parrot diets can be a lot of things, but they should never be boring. Unexciting food bowls will mean your birds are only eating to assuage their hungers—a dangerous concept if you have a bird who is not feeling well, or one who does not know much about raising healthy babies in the nest.

It is notable that I have adopted some parrots from former sites where they were fed processed diets and many of these birds absolutely will not touch a single pellet in the dish even when I serve them on top of only cooked or soaked foods.

How Do They Taste?

Palatability is another factor in avian extruded diets. Or perhaps "acceptability" is a better term. A poor tasting diet will be ignored or thrown out of the food dish by your parrot. A good example is those long greenish, alfalfa looking pieces with a slight fishy smell one used to find in large hookbill mixes. I wonder if any psittacine anywhere ever ate those things?

I seldom force my hookbills to do anything, especially eat a diet they do not like (there are just too many nutritious ways to feed). Therefore a pellet my birds do not like, I will no longer offer. Beyond reading the ingredients and looking for chemicals or sweeteners, I actually like to do my own taste test--crunching up a pellet and eating it.

What about coloration? Well, it is my experience that the parrots in my flock who eat pellets, eat them whether they are colored or not. I suspect that making those rainbow colored things is more of a marketing ploy designed to attract human purchasers than to entice the birds. What's more there are many pet birds which waste pellets because they refuse to eat the yellow ones or blue or red ones.

More to the point for bird keepers is whether the source of that colouration is merely a cheap dosing of artificial food dyes No.#2, #6, #10 etc. There are plenty of natural coloring agents out there, chlorophyll and algae greens, beet and berry reds, turmeric yellow—and it seems to me that every bird diet maker should be seeking these out and using them. Processed diets are expensive enough to include such extra efforts and even if they are not, most conscientious parrot owners would be willing to pay a few extra pence to have natural colorings.

Texture, now there is an important facet for psittacines. Among the wide variety of textures on the market, some of them I will not use. Some are so rock hard that my weaker-jawed birds do not like eating them. Perfect would be that tortilla chip crunchiness or maybe the hardness of an almond kernel. The difficulty is that some of the softer pellets are practically useless for feeding in climates like Hawaii or Florida or the humid Midlands in summer. You put a dish out and in an hour they are spongy and have no crunch. As an aside about all those cute shapes, they are interesting for my birds that want to tongue and play around a bit, but basically when parrots are hungry—they eat.

I have watched many adult parrots eating nuts and kernels. They seem to masticate the meats in order to extract the oily portions letting much of the fiber fall to the ground. If I were to suggest an improvement for pelleted and extruded foods, it would be to change their texture to be more like a walnut and to increase the oil content to make them more nutlike. Certainly this would benefit the species such as macaws, greys, capes and amazons who are oil fruit and nut eaters in the wilds.

When working with those larger combination chunk diets, I have been astounded to notice large parrots holding same in the claw and actually chewing out the bits of corn and millet and seeds and shredding to waste all the rest of the nutritive batter. It struck me as a very inefficient way to feed. Even worse can be those nugget-type of pellets which are molded together with sweet material which becomes very sticky when humid.

In fact expensive waste is a major consideration in any processed diet feeding. Hence we feed only those amounts of pellets which our birds willingly eat (5%) and only offer them with wet and sprouted and cooked foods so they provide some crunch. If I try to give pellets with afternoon dry seed mix, they will end up wasted.

Conclusions

There is no single perfect way to feed captive parrots. Please do not think that the convenience of throwing a cat-food like product into the same dish every day is doing your bird any real favors. Moreover, be very careful not to get in a habit of "topping off"

an extruded diet bowl with more pellets every day without washing it. I have examined such bowls and found the bottom level can be a layer of damp stale powder leavings. A quality vitamin-mineral powder sprinkled sparingly in tiny "pepper-like" amounts on moist food and then well eaten by your pet is every bit as valuable as the daily vitamin pills taken by humans to complete their full range of nutritional needs. All exotic bird diets are still in their fundamental and formative stages. Until we go out into the wilderness and analyze every seasonal item eaten by every individual species, we will still be making guesses. And remember, nothing substitutes for those ingredients found in fresh, green, raw, organic live foods. They carry the message of life itself...