

Diet & Nutrition

Fabulous food for feathered friends!



Created by
The Gabriel Foundation

Natural Feeding Behaviors



- In the wild, parrots wake up and immediately fly to their feeding area, which can be miles away from their roosting or nesting sites in some cases. Wild parrots are seasonal feeders, selecting a food source that is readily available to them. Parrots consume enough food to fill their crops, then fly to a safe place to roost and digest their food.
- For most parrots, their day is filled with exercise, preening, dozing and 2 predominant gorging periods. Those gorging periods can last a few hours. After the second gorging period, they return to settle in for the night to digest and get their beauty sleep.
- This does vary by species! Some species, like cockatiels, forage throughout the majority of their day.
- Though it can be interesting to consult ornithological resources to research what your parrot's species eats in the wild, their wild counterparts' dietary requirements are different than captive parrots. The demands of a wild life are far different than the dietary needs of captive individuals. A wild diet also doesn't necessarily mean best diet and is not best for captive parrots.



Pearl enjoying a Nutriberry

Intro to *Avian Nutrition*

- Birds have very high metabolisms and eat a great deal of food for their size.
- Avian nutrition is not an exact science. Every species may have somewhat different nutritional needs, but the basic nutrient requirements are known.
- Pellet manufacturers have developed formulations that work in most cases (we will list pellet brands later in this presentation)!
- Malnutrition is still the root cause of 90% of clinical cases seen by veterinarians according to veterinary feedback & **the all-seed diet is usually the cause of malnutrition cases!**

Bird Seeds

- According to veterinarians and stores, many people still feed an all-seed diet. **Seed diets result in malnutrition which can lead to obesity and other health issues.**
- Some seeds are high in fat and lacking nutrients; because of this, parrots eat excess calories to try and make up for incomplete nutrition.
- Wild bird seed is not an appropriate parrot mix, as it is processed differently and can be contaminated by rodents. It is not recommended by veterinarians!
- This said, parrots love to eat seed, so it can be challenging to teach them to eat other foods.



Bird Pellets

- Colored pellets may be of temporary benefit for converting a bird from a seed diet to a pellet diet. If colored pellets do help you to convert your bird to a pellet diet, we recommend transitioning to a product without artificial colors.
- We recommend looking for a natural (no color) a pellet; if possible, avoid pellets with sugars listed as one of the first 5 ingredients.
- Watch out for artificial preservatives like BHA, BHT, or ethoxyquin. These are known to cause cancer and are not allowed in human foods.
- For birds less than 200g, pellets should comprise 25% to no more than 50% of the bird's diet.
- Over 200g: pellets recommendation is 50%-70%. Less than a 50% pellet diet for larger birds won't provide enough daily essential nutrition.
- Pellet manufacturers that work with veterinarians and collaborate with ongoing research on nutrition are the best to look for. They tend to tweak their recipes as more is learned about parrot nutrition.



Kigh Kigh excited about a pellet

Diet Conversion



TIPS FOR FOOD TRANSITION

- To convert a parrot's diet, mix the pellet food that you would like to feed with other foods that the bird likes to eat.
- You can try offering different brands of pellets; offering more than one brand gives your bird more variety – Zupreem fruit blend is a favorite for transitioning birds to pellet!
- Pretend to eat the pellet in front of the bird...don't give your bird any until he's curious and soliciting pellets from you.
- Let your bird observe other birds who are good eaters to learn improved eating habits.
- Try offering pellets at different times of day such as morning instead of evening to see if that helps.
- Make pellets interesting by using them in foraging opportunities! You can try wrapping them in a piece of paper or placing them in foraging toys.
- Be persistent and patient! It's our best tool!

Good Uses For Seeds!

- For rewards in training!
- For foraging behaviors!
- For enrichment!

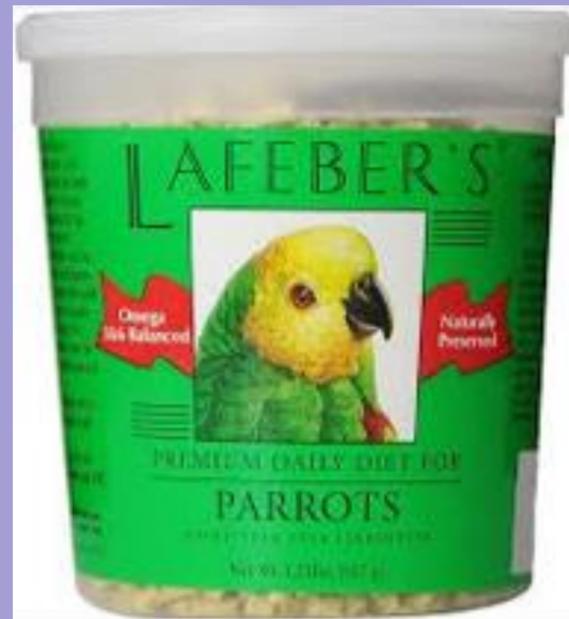
TGF recommends purchasing seeds that are sold for human consumption and to refrigerate them to better control rancidity and pests.



Recommended Pellet Brands!



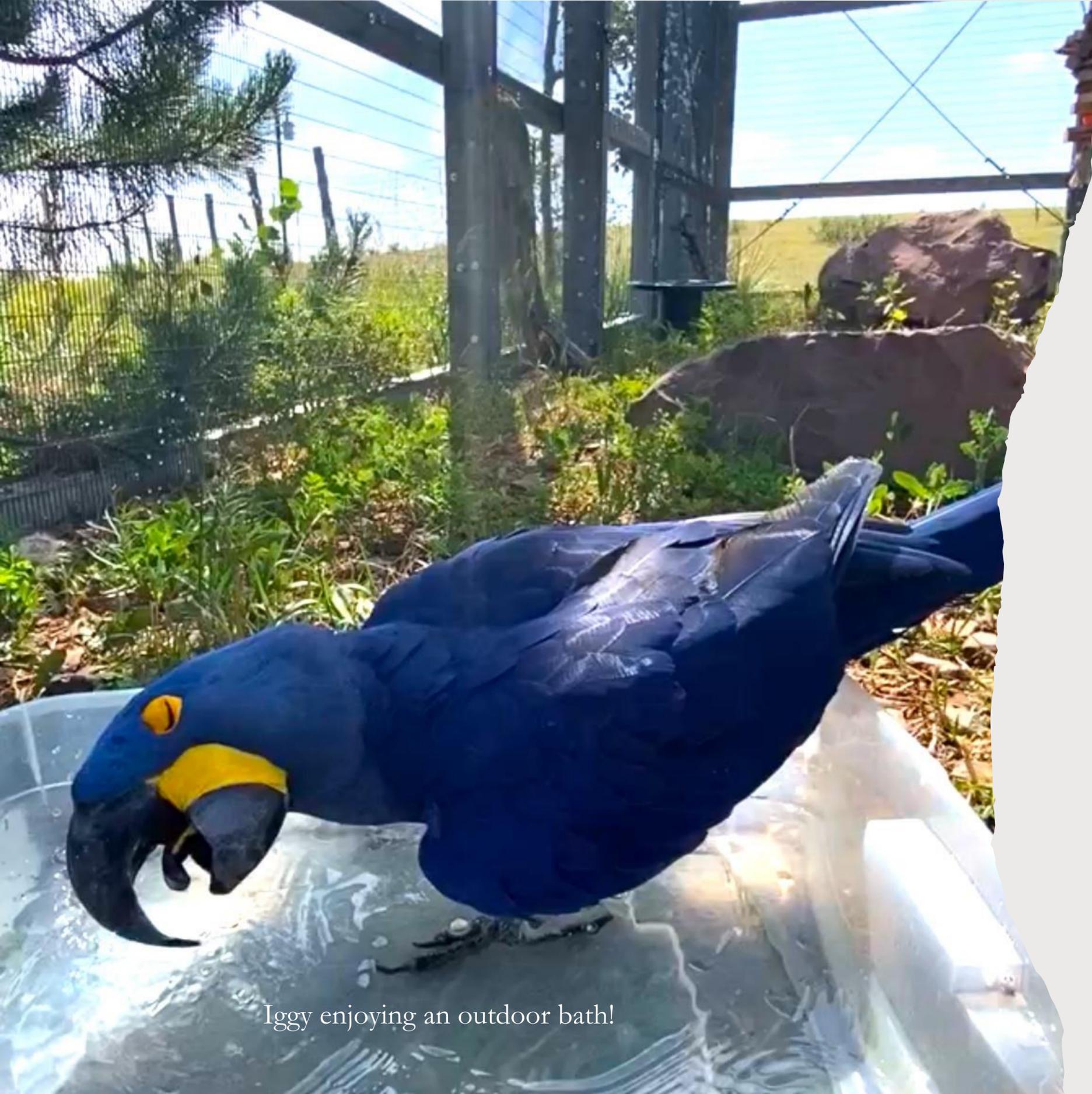
- Zupreem
- Harrison's
- Mazuri
- Roudybush
- Caitec Oven bites
- Lafeber's or Nutriberries



Essential Fatty Acids (EFA'S)



- Essential Fatty Acids (EFA's) are the building blocks for fats and oils in the body. Parrots should have a daily source of EFA's in their diet. They are essential in the diet, because parrots cannot manufacture EFA's on their own.
- Wild parrots' diets do contain omega-6 fatty acids, which is why we must supply them to our feathered family members.
- The main EFA's are omega-6 and omega-3. These are the building blocks to the main 3 fatty acids: ALA, DHA, and EPA. Birds do best with ALA, which is found in plant sources such as flax and chia seed. Omega-3 is also included in many pellets and Nutriberries.
- The best sources of EFA's for parrots are flax and chia seeds. OK sources are walnuts and hempseed. Cold pressed flaxseed oil is also good, look for 3:1 Ratio of omega 3:6
- Companion parrots are more prone to obesity, fatty liver disease, heart disease, and atherosclerosis than their wild relatives. Omega-3 EFA's are helpful in minimizing the risk of these diseases.
- A little goes a long way with EFA's! You only want to offer a small amount each day to prevent excess calories. For example, one drop of flax seed oil is enough for a Senegal parrot!



Iggy enjoying an outdoor bath!

Water

- The body is made of 80% water! Water intake is crucial to your bird's health, as dehydration is dangerous.
- We recommend providing clean water in a bowl for your bird throughout the day. This may mean that you need to replace their water if they use that bowl to take a bath or soak food items.
- Water bottles are not recommended, as keeping them clean can be tedious and difficult. They are also prone to clogging or breaking, which could leave your bird without a water source until you notice! They also prevent your bird from using their water for other natural behaviors such as bathing and soaking foods.
- Wash water bowls with hot, soapy water at least once a day or more often if they become dirty.



Veggies

- Veggies are a valuable part of your bird's diet, as they are high in nutrients and low in calories! They can be fed raw or lightly cooked.
- Offer dark leafy greens such as kale, collards, Swiss chard, dandelion, mustard, or broccoli!
- Orange and yellow vegetables are good sources of beta carotene and other nutrients!
- Iceberg lettuce shouldn't be used as a nutrient source in the diet unless specified by a veterinarian because it is devoid of much nutrition. It can be a good water source, however! Similar issues arise with celery and jicama, which should also be fed in moderation or as treats.
- Though raw or cooked vegetables supply nutrition, vitamin and nutrient content can vary when cooked. Cooked orange and cruciferous vegetables may be more digestible than raw and may release more beta-carotene, the precursor to vitamin A. Lightly microwaving or slightly steaming vegetables is ok and there is little nutrient loss.
- Never feed canned vegetables (BPA used in cans is bad for birds).
- If fresh is not available, frozen can be OK. **Check labels for sodium content.**

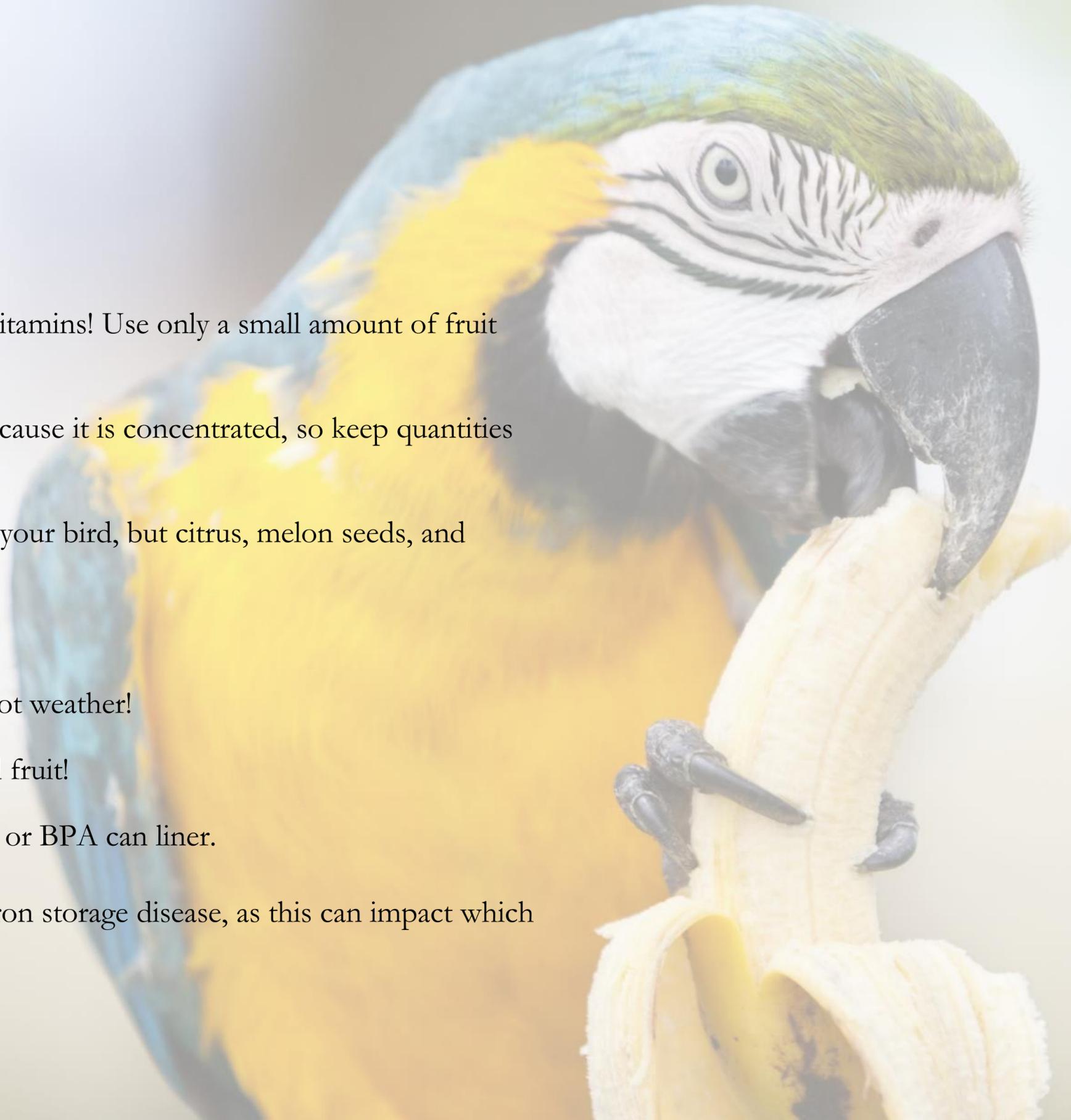
Lucy very excited about prepping veggies.

Have You Tried...

- Brussels sprouts?
- Cauliflower?
- Celery root?
- Dandelions greens?
- Fennel?
- Carrot tops?
- Hot peppers?
- Zucchini?
- Raw green beans?
- Asparagus?
- Beets?
- Radishes and tops?
- Collard or turnip greens?
- Winter squash, pumpkin?



Fruits



- Fruit is a sugary, quick energy source with some vitamins! Use only a small amount of fruit for your bird because of its high sugar content.
- Dried fruit contains 10x more sugar than fresh because it is concentrated, so keep quantities small.
- Some pits and seeds contain toxic ingredients for your bird, but citrus, melon seeds, and mango pits are safe!
- Avocados are toxic to birds.
- Remove uneaten fruit within 3 hours, sooner in hot weather!
- For a challenge, you can let your bird peel washed fruit!
- Never feed canned fruit if it contains added sugar or BPA can liner.
- Ask your vet if you have a bird species prone to iron storage disease, as this can impact which fruits are safe to eat.

A collage of various dairy products including a pitcher of milk, a bowl of ricotta cheese with basil, a wedge of Swiss cheese, a small jar of yogurt, and a white egg on a wooden surface.

Dairy

- Birds do not have the enzyme lactase to digest lactose (milk sugars), so most dairy should be avoided.
- Hard cheese has much lower levels of lactose than milk but is high in sodium and fat.
- Many dairy products are high in sugar and sodium, which are to be avoided.
- A little non/low fat plain yogurt offered is OK because the natural bacterial enzymes used in the process of making yogurt break down milk's lactose
- Consider trying lactose free dairy products instead!

Foods to avoid [!]

- Avocados (and guacamole) – will kill your bird quickly
- Alcohol – will kill your bird slowly by damaging its liver
- Caffeine – not healthy and may cause heart palpitations
- Aspartame – not healthy for us or birds
- Chocolate – contains theobromine, which is toxic to some animals and caffeine
- Raw rhubarb leaves – contain extremely toxic amounts of oxalates
- Sprouted beans. Exceptions are: adzuki, lentil, chickpea, dry pea and mung. These are OK to sprout and ready in 4-5 days. Other types of beans need to be cooked after being boiled due to toxins. Never feed raw fava beans, as they have these toxins.





More to avoid

- Avoid refined flours.
- Avoid animal proteins due to saturated fat content and heart, vascular, and other health concerns.
- Eggs currently are not recommended by avian veterinarians due to cholesterol concerns. We do know that birds process dietary cholesterol differently than we do.
- Egg whites are OK. If you must feed egg with yolk, then limit it to no more than once a week or less and about 1/2 teaspoon for a large size parrot.
- Do not give tropical oils such as coconut or palm oil as studies continue to link these oils with heart and vascular disease issues:
 - Red palm oil appears to raise bad LDL cholesterol.
 - Coconut oil increases LDL cholesterol as well. It also raises HDL (good) cholesterol, but very little; not enough to outweigh the increase in LDL.

Food for thought ...

Keep in mind how small a bird is – a seemingly small piece of food for a human stomach is comparatively a gigantic piece of food for a parrot!

Best to avoid junk foods, salty foods, fatty foods, and sugary stuff.



Introducing new foods

Do you have a food processor? If so, great! This is a great tool for making chopped veggies. If not, you can cut the food up into very small pieces with a knife so that the bird has a harder time picking out its favorite foods and disregarding the rest. This makes the bird work harder to get its favorite food, and hopefully results in them eating some of the healthier foods as they go.

We suggest feeding new or less desired foods in the morning when the bird is hungriest, but keep in mind that evenings may work best for some.

Either cover the old food with the new food or mix the two thoroughly together.

To get a seed junkie to eat fruits and veggies, try mixing a very small amount of seed mix into the chopped veggie mix



Birdy mash!



- Parrots typically take well to mash mixtures! Mash mixtures provide a good opportunity to mix in foods that birds may not normally eat!
- Mash can be made from a recipe or your own mix; commonly a 50:50 combination of legumes and whole grains. We suggest you stick to legumes we know to be safe: lentil, adzuki, mung, chickpea, dry or split pea.
- Try adding a variety of healthy ingredients like freshly chopped dark leafy greens and vegetables to cooked mash mixes. Mix in some chia, flax seeds (1/4 tsp for a medium bird) or flaxseed oil
- You can also sprout seeds to add to your mash! Start new sprouts every 2-3 days and only make the portions your flock will consume during that time. Sprouted seeds can be helpful in diet conversion. Total seed in diet should be about 5%-10% or less.



mix it up! **Ingredients**

Acceptable grains:

- Millet
- Wheat
- Kamut
- Spelt
- Quinoa
- Hulled Barley
- Buckwheat
- Oat Groats
- Farro
- Triticale

Acceptable Legumes (dry beans):

- Mung
- Adzuki Lentils
- Chickpeas(Garbanzo)
- Dry pea or split pea
- Black-eyed pea

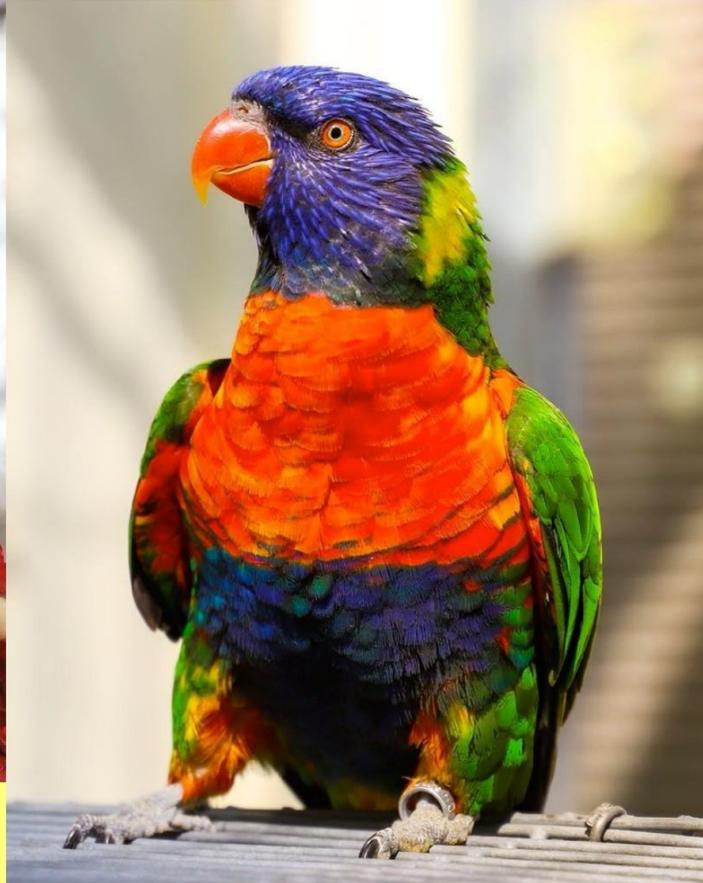
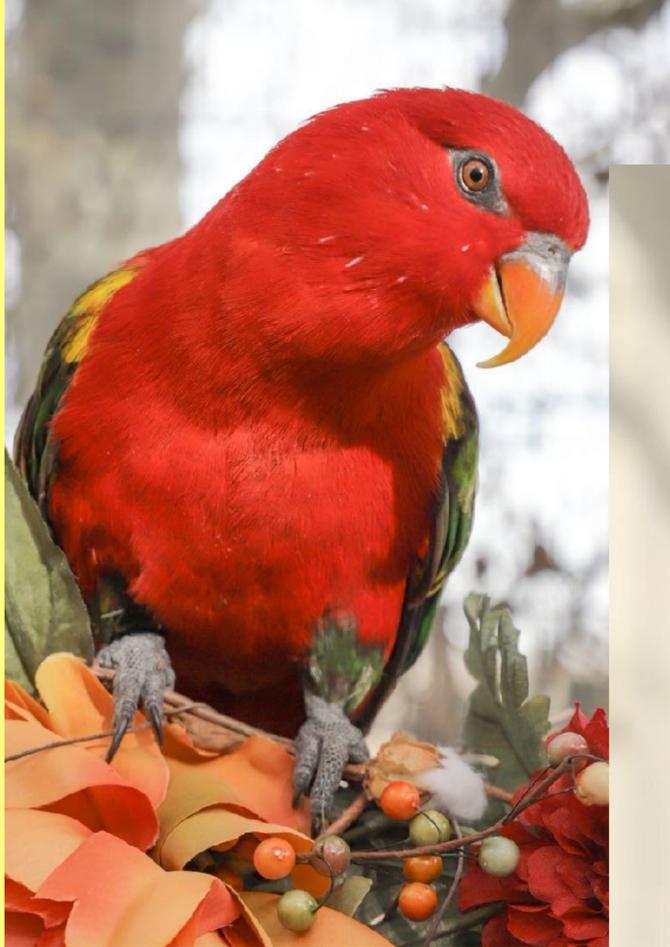




tips & tricks.

- Mash can be cooked in a large quantity and then frozen for later use! Cook up a big batch and then scoop into ice cube trays or baggies to put in the freezer for later. Take out a few “cubes” the night before you want to feed the mash, and thaw in fridge or microwave. You can also freeze in 2-3 day “portion” bags.
- To add fruits and veggies to your mash, chop up fresh greens and veggies about every 4-6 days and store in paper towels in fridge to add when you feed; add fruit to grain legume mix no earlier than when you feed.
- Don't keep more than you can use in a few days in the refrigerator, and discard the moment it has gone bad or after 3 days.
- Don't leave mash in bird's serving dish longer than two hours because of bacterial buildup; this time will vary depending on where you live, room temperatures, and humidity.
- Remember: Mash or fresh diets do not provide all essential nutrients or correct balance of nutrients, so continue to provide pellets.

Special Dietary Needs



Lories and Lorikeets: Low iron, high fruit, special nectars and powders make up most of diet; NEVER use honey, Karo syrup or canned fruit cocktail.

Eclectus: We're still learning! They seem to do well on mash and do fine with a few pellets, increased amount of fruit, vegetables, and EFA's.



Lory and Lorikeet Diets

- Lories, lorikeets, and softbills require a special diet!
- They don't usually eat seed. Instead, they should be fed a quality nectar mix.
- A variety of commercially manufactured lory diets are available, but vitamin A contents vary significantly, some are too high in vitamin A.
- Diet should have a high percentage of fruits, but make sure to avoid citrus since it causes upset stomachs.
- Softbill foods spoil very quickly and must be replaced several times daily.
- Lories and softbills have very runny stools due to the high-water content of their diet.
- Lories are very prone to malnutrition-related disease.



Weighing Your Bird

- Ideally, weigh your bird at least once a month or more frequently during diet transition.
- Be aware of a 10% weight gain or loss which can be an indicator of a sub-clinical medical problem.
- You can use a kitchen scale that weighs in grams, and you can have a perch made to fit the scale if the bird is not comfortable with the flat scale.
- You can train your bird to step onto the scale itself!



Aviary Feeding Schedule

If you'd like to mimic our feeding schedule here at the aviary, here's what a typical day looks like:

AM:

- Multi-grain and legume mash, finely chopped vegetable/greens mix (dark greens like kale, collard, mustard, Swiss chard, mixed peppers, beets, turnips, zucchini, squash)
- Food left in cage with birds for about an hour, then birds typically go out to the flights for play/activity OR have showers, foraging activities in cage
- Fresh water available at all times

PM:

- Finely chopped vegetable mix, a little fresh ginger root, with small amount of fruit added (one berry selection, mango, piece of orange, banana, etc – fruits to comprise ~ 5 % of total diet). Then, sprouts may be added to the mix. This fresh food is fed along with pellets, small amount of seed mix, and 1-4 nuts, depending on bird species, size and age.

Thank you

We hope you enjoyed our Diet + Nutrition presentation!
Please navigate to our website to complete the Diet & Nutrition quiz.

