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ORGANIZATION

WHY YOUR PARROTS NEED BALANCED NUTRITION

In This Report

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Photo: Barbi-Humberg-Nossum, Barbi's Birdhouse, Pied Cockatiels being weaned on the Best Bird Food Ever! Complete Protein Sprouting Blend.



THE SCIENCE BEHIND WHAT YOU'RE ABOUT TO READ

A FORWARD FROM LESLIE



I've been writing about exotic avian topics for more than 16 years, employing a heavy research-based approach. Because of this, I am recognized as one of the foremost authorities in using *Balanced Exotic Avian Nutrition* for preventing or reversing illness and disease in exotic birds. The research I've done, for my avian related books and articles, has provided the scientific foundation that is at the heart of my bird food product, the Best Bird Food Ever! Complete Protein Sprouting Blend, and my new '*Balanced Exotic Avian Food Plan*.'

Every piece of information in this report is supported by peer reviewed, published, scientific papers, or authorities in the field who are using nutrition to create good health. This information was unearthed during the course of my many authored pieces with *Parrots* magazine and numerous other parrot-related publications. Striking similarities came out from this research between our feathered friends and ourselves, most importantly the factors linked to causing illness and disease in both humans and parrots.

Until we have more studies defining the specific nutritional needs of parrots, particularly those that have been conducted in a humane manner, I am confident that using the information in these published papers and books will serve us well in feeding our parrots the most healthful and balanced combination of foods possible for their good health and well-being

THE HEALTHIEST FOOD CHOICES FOR YOUR BIRDS



FIRST CHOOSE ORGANIC



With all the new scientific data that's been published since 2008 regarding problems linked to pesticide residues in foods it's more important than ever to make the decision to feed your birds organic foods. Hundreds of human case studies have been documented as being directly linked to pesticides. These diseases include asthma, autism, learning disabilities, birth defects, reproductive dysfunction, diabetes, Parkinson's and Alzheimer's diseases, several types of cancer (including leukemia and lymphoma) and damage to the liver, kidneys, lungs and other body organs.

YOUR BIRDS NEED COMPLETE PROTEIN EVERY DAY

In 2013, my editor at *Parrots* magazine, asked me to write an article on complete protein from plant foods. What I discovered amazed me.



I learned there is no such thing as a single food, eaten by itself, containing complete protein. Foods such as eggs, beef, turkey, chicken and cheese have been described

as containing complete protein because they contain some of all the essential amino acids required to makeup a complete protein. Worldwide optimal levels for the nine essential amino acids in human nutrition have been established and many have interpreted them to be the amino acid values that account for complete protein. In using these accepted levels we define Complete Protein as:

all the essential amino acids present in the proper proportions, provided by a combination of foods being eaten.

Young Triton Cockatoo

“Complete Protein” is having all the essential amino acids present in the proper proportions, provided by a combination of foods being eaten.”

Best Bird Food Ever! Complete Protein Sprouting Blend at three days growth -ready to feed.

These recognized levels are the guidelines I use when combining foods to contain complete protein for our birds. Unless a food has been specially formulated to provide complete protein to meet a bird's nutritional needs, such as the

Best Bird Food Ever! Complete Protein Sprouting Blends, the food you're feeding does not contain complete protein. This means your bird's nutritional needs are not being met.



My research and review of published scientific papers, and the nutritional work I have done with my own parrots and those belonging to my clients, has led me to believe that complete protein is the most essential nutrient missing in the exotic avian diet today.

COMPLETE PROTEIN IS ESSENTIAL FOR A HEALTHY IMMUNE SYSTEM

In 1984, David N McMurray, PhD, published a paper in the *Progress in Food and Nutrition Science Journal*, titled “Cell-mediated Immunity in Nutritional Deficiency.” In this paper McMurray explains, “Dietary deficiencies of specific nutrients profoundly alter cell mediated immune responses in man and experimental animals. Both moderate and severe deficiencies are associated with significant changes in immunocompetence.”

In particular, McMurray highlights, **“Malnutrition, particularly dietary protein deficiency, is known to be accompanied by significant impairment of immune functions and resistance to many infectious diseases in humans and experimental animals.”**

In the veterinary text, *Avian Medicine Principles and Application*, Louise Bauck, DVM, explains, **“Infection always occurs secondary to a situation or circumstance that caused the immune system to become compromised.”** The quality and type of foods a parrot eats has a direct affect on the health - or lack of health - of their immune system.



And, in the same veterinary text book, Patricia Macwhirter, DVM, clarifies that, “Avian malnutrition or undernutrition can cause a specific problem or suppress a bird’s immune system.”

Let's take a look at two fungal infections that commonly affect parrots and are everywhere in the environment:

aspergillous and candida. Treatment options available are palliative, managing the symptoms without the ability to cure the disease.

The only thing that can prevent your parrot from contracting either aspergillous or candida is a healthy and well functioning immune system.

**YOUR BIRD NEEDS
A HEALTHY
IMMUNE SYSTEM**

A well-functioning immune system can also prevent a host of common avian infections: including bacteria, fungus or viruses.

FOODS THAT MUST BE AVOIDED AND WHY

Budgerigar

When using a balanced food plan to promote health and wellness in your birds, or to reverse a disease that has become established, the foods that must be eliminated from your bird's food plan are equally as important as those that your bird must eat everyday.

Why is avoiding these foods so important? Because of the damage they can do to the delicate avian body and physiology. Compared to us our birds eat just a minuscule amount of food each day. When looking at these tiny proportions, it's vital that each beak-full of food be packed full of all the nutrients that your parrot must eat everyday

SOY

Much scientific research has been done covering the problems with feeding soy. The main concern is that soy contains phytoestrogens, naturally occurring compounds that mimic the hormone estrogen in the body. Both male and female birds both have some amount of estrogen naturally occurring in their bodies. These phytoestrogens have been documented as disrupting endocrine functions throughout the body. The endocrine system secretes hormones that control the various functions of cells, tissues, and organs throughout the body. This means that soy can throw any aspect of the endocrine system into chaos. The endocrine system includes the adrenal glands, parathyroid gland, pituitary gland, and thyroid gland, as well as the ovaries, pancreas, and testes.

There is also concern that the soy phytoestrogens have the potential to cause infertility and promote breast cancer in adult women. In my opinion soy is best avoided, especially when we have healthier options.

Phytoestrogens are also potent anti-thyroid agents that have been shown to cause hypothyroidism (an under active thyroid) and thyroid cancer in some individuals. In infants who were fed soy baby formula some individuals developed autoimmune thyroid disease.

And if you're wondering about the studies that proclaim the healthful benefits of feeding soy, these projects mainly study soy isoflavones--the plant estrogens in soy most often credited with cancer prevention. Isoflavones are listed as "carcinogens" in many toxicology textbooks. They have also been proven to be mutagenic (causing cellular mutations), clastogenic (causing the destruction and breakage of chromosomes) and teratogenic (causing malformations or deformities especially in the developing fetus or egg embryo). Recent studies have even shown that soy accelerates the growth of breast cancer. In published studies researchers must declare any conflict of interest regarding where their funding came from in relationship to the topic being researched. Many of these studies promoting soy as being 'healthy' were funded by the international, multibillion dollar, soy industry.

SEEDS OF ALL TYPES

The main concern with feeding seeds, all types of seeds, even seeds in the 'soak and feed' or those poorly formulated sprouting mixes is linked to the incredibly high levels of omega-6 essential fatty acids (EFAs) these seeds contain.

There are three essential fatty acids most commonly referred to, these are the omega-3, omega-6 and the omega-9 essential fatty acids. Excess carbohydrates are converted into stored fats. Consuming excess fats and fatty acids can lead to obesity and chronic disease.

The following chart gives you a small sample of the extremely high levels of omega-6 essential fatty acids that are in seeds.

Nutritional Content of Common Bird Seed Ingredients

In 1 oz	O-3	O-6	Ratio	Deficient in Essential Nutrients	Contains:
Millet	33 mg	564 mg	1:17	Vit A, C, most B's, D, E, K, Choline, Betaine, calcium, iron, zinc, manganese, selenium, EEA--tryptophan & methionine, enzymes	High in calories, carbohydrates, excess fats, folate, magnesium, phosphorus, potassium, EAA-isoleucine & lysine.
Safflower seeds	31 mg	7,863 mg	1:253	Vit A, C, most B's, D, E, K, Choline, Betaine, calcium, iron, zinc, manganese, selenium, EEA--tryptophan & methionine, enzymes	High in calories, carbohydrates, excess fats, folate, magnesium, phosphorus, potassium, EAA-isoleucine & lysine.
Sunflower seeds	21 mg	6,452 mg	1:312	Vit A, C, most B's, D, E, K, iron, zinc, sodium, zinc, copper, manganese, EEA--tryptophan & methionine, enzymes	High in calories, carbohydrates, excess fats, folate, beta-carotene, vit E, choline, betaine, magnesium, phosphorus, potassium, sucrose* , EAA-isoleucine & lysine.

*Ideal ratio
is 1:4*

Excess carbohydrates, if not used by the body, are converted to stored fats.

Consuming excess fats, and excess O-6 essential fatty acids, causes obesity and chronic disease.

*Sucrose is sugar and should be avoided in all foods for your birds.

Nutrition Data from USDA SR-21. Chart by Leslie Moran © 2018

As the name implies, they are essential nutrients and must be included in your bird's diet everyday. But the focus needs to remain on the balance between these fatty acids. **These essential fatty acids must be in balance with each other.**

The ideal ratio of omega-3 to omega-6 essential fatty acids is 1 to 4.

The problem with allowing your birds to eat high levels of the omega-6 fatty acids is that omega-6 EFAs have been repeatedly linked, by numerous published studies, to causing inflammation in the body. And this inflammation has been documented as causing a wide variety of diseases including increases in chronic inflammatory diseases such as nonalcoholic fatty liver disease (our birds can get this), cardiovascular disease, obesity, inflammatory bowel disease, rheumatoid arthritis and Alzheimer's disease.

All seeds contain excess levels of the omega-6 essential fatty acids. It makes no difference if they are fed dry or sprouted, for your bird's improved health they should be avoided.

PELLETS

When I suggest pellets are unnecessary in a parrot's diet many exclaim, "But my avian vet told me to feed pellets." Our avian vets are wonderful at diagnosing and treating illness and disease in our birds. But because I use a well balanced avian food plan for creating health and wellness in birds, my view on avian nutrition is unique.

I stopped feeding pellets to all my parrots in 2013. A situation developed and I realized pellets were not providing my flock the nutrition that the 'marketing hype' was telling me they would. The experience taught me the pitfalls of pellets:

1. Pellets are comparable to dry dog and cat food. If you care for dogs and cats, dry food is not healthy as it lacks ~~hundreds~~ of essential thousands
2. Pellets do not provide complete protein.
3. When pellets are made, nutrients are destroyed. Pellets lack many essential nutrients our birds must eat everyday. Plus, the nutrients added are the fat soluble vitamins A and D. Research has shown it's easy to overdose parrots on these essential nutrients. My '*Balanced Exotic Avian Food Plan*' ensures parrots receive these essential nutrients every day.

In place of pellets I make and feed my **Ideal Cooked Mash**, made with the Best Bird Food Ever! sprouting blend ingredients. The purpose of feeding your birds this mash is to ensure they receive their required daily amount of complete protein. You can use our BBFE mash in place of pellets, or other soft cooked foods your bird may enjoy (cereals, noodles, cooked grains, cooked beans, baby food, etc).

THE NUTRIENTS YOUR BIRDS MUST EAT EVERY DAY

It's essential your birds eat a wide variety of antioxidants because of the free radical scavenging activities they perform.

There are **thousands** of nutrients your parrots and finches must eat everyday to maintain their good health. And if you are working to restore them to good health, helping them overcome some type of illness or disease, then it is even more important that they eat a balanced combination of foods that provide all these essential nutrients everyday

- Complete Protein
- Enzymes
- Macro Minerals: calcium, phosphorus, magnesium, potassium, sodium and chloride chloride
- Trace Minerals: zinc, selenium, copper, iodine, manganese, iron, cobalt and sulphur.
- Balanced calcium to phosphorus ratio.
- Vitamins: B complex, B6 (pyridoxine), C, E, K, A- created in a healthy liver from beta-carotene (the precursor to vitamin A), D from full spectrum lights, or from sunlight not through glass.
- Antioxidants: beta-carotene, carotenoids, bioflavonoids, SOD (super oxide dismutase), and more.
- Fresh, filtered water.



One example of a balanced meal for a Blue & Gold Macaw. Top dish: fresh fruit, walnut pieces. Bottom dish: Best Bird Food Ever! Complete Protein Sprouting Blend with steamed vegetable mix.

The idea of feeding parrots a wide variety of different foods is missing one important quality - it lacks balance. Parrots and finches require hundreds of nutrients each day. The only way to ensure they eat the foods that provide these nutrients is by feeding balanced amounts of certain foods, while limiting or completely avoiding others.

The approach I take to '*Balanced Exotic Avian Nutrition*' has been developed over previous decades. My background in using

food and nutrition for preventing or reversing illness and disease and the research behind my articles for *Parrot's* magazine (since 2002) has guided me in creating this '*Balanced Exotic Avian Food Plan*'. During its development I've used it successfully with my own parrots and finches, and my clients birds. This foundation has given me an extensive and unique perspective of how simple and easy it is to use a proper balance of natural, organic, wholesome foods to provide parrots and finches all the hundreds of nutrients they need to eat everyday to prevent or reverse the commonly seen, well-known symptoms of avian malnutrition and undernutrition.

My '*Balanced Exotic Avian Food Plan*' uses our Complete Protein Sprouting Blends as the foundational food, it provides complete protein, catalytic digestive enzymes, vitamins B complex, pyridoxine (B6), C, E & K, antioxidants (phytonutrients, beta-carotene (the vit A precursor), carotenoids, bioflavonoids, superoxide dismutase (SOD), other antioxidants, has a balanced calcium to phosphorus ratio,

with magnesium, potassium, sodium, chloride and contains all key trace minerals like selenium, zinc, copper, manganese, sulfur and iodine.

My '*Balanced Exotic Avian Food Plan*' also includes other wholesome natural, preferably organic, foods, fed in specific amounts depending on the parrot species and sex, the bird's size and condition of health or illness. These include a specific mix of certain fresh and lightly steamed vegetables, a specific amount of certain fresh and/or frozen fruits, a specific nut providing an ideal balance of omega-3 to omega-6 essential fatty acids, fed in conjunction with a few other specific natural foods to round out the balance in this '*Balanced Exotic Avian Food Plan*'.

To remove any concerns linked to sprouting, common with other poor quality blends, ours have been formulated with organic, human-grade, ingredients that have a compatible germination and growth rate. This prevents mold from developing because the ingredients grow into a life-giving food in two to three days. This '*Balanced Exotic Avian Food Plan*' does not include dry seeds or pellets but provides healthier alternatives.

The Best Bird Food Ever! Complete Protein Sprouting Blend takes the guesswork out of feeding a balanced diet to your birds. When your bird eats our sprouting blend every day, you know they're getting their daily requirements for complete protein met.

For more information on the '*Balanced Exotic Avian Food Plan*' email
Leslie@EmeraldArk.org
and ask for information about joining
the '*Healthy Bird Project*.'



READY TO GIVE YOUR PARROTS BALANCED NUTRITION?



After the death of her beloved Scarlet-chested grasskeet, Leslie Moran shifted her avian efforts from breeding to understanding and developing a nutritional solution that would extend the health and vitality of exotic birds. After years of research, the Best Bird Food Ever! and her '*Balanced Exotic Avian Food Plan*' were born. Let the Best Bird Food Ever! take

the complexity out of providing balanced nutrition for your feathered companions. Learn more about Leslie and these solutions today at



bestbirdfoodever.com

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