

# Avian Nutritional Diseases

*A PowerPage Presented By*



Because of their relatively high metabolic requirements and picky eating habits, pet birds are prone to several important nutritional deficiencies. Free feeding a bird a balanced diet may prove inadequate if they do not eat every part of the mix. This PowerPage provides a brief overview of several nutritional diseases of pet birds.

## Vitamin A Deficiency

- Birds have a high vitamin A requirement
- Hypovitaminosis A is one of the most common deficiencies in pet birds
- Vitamin A is important for the differentiation of epithelial cells and immune system function
- Clinical signs of vitamin A deficiency include:
  - Sinus infection
  - Blunted choanal papillae
  - Squamous metaplasia of epithelial tissues
  - Poor skin condition
    - Hyperkeratosis

## Calcium Deficiency

- The most common mineral deficiency in pet birds
- Calcium is important in birds for:
  - Egg shell production (deficiency can lead to egg binding)
  - Bone formation
  - Blood clotting
  - Neuromuscular and cardiac function
- Seed diets may only contain approximately 20% of the required amounts
- Conures and African Grey parrots may have increased susceptibility
- Avoid by either feeding high calcium foods such as cabbage, kale, watercress, or by supplementation with mineral blocks, ground oyster shell, or “cuttlebone”

## Essential Amino Acid Deficiency

- Seed diets as well as most grains, fruits, and vegetables contain protein of low biological value
- Cockatoo species are particularly susceptible
- Common clinical signs include anemia and decreased muscle mass

## Excessive Dietary Fat

- Most commonly a problem in macaws, Amazons, cockatiels, and budgies
- Can lead to:
  - Hepatic lipidosis
    - Progressing to hepatic failure
  - Development of xanthomas/lipomas

## Excessive Sugars

- Sweets such as pastries or large amounts of sweet fruits can result in fermentation of simple sugars leading to an anaerobic intestinal environment that promotes growth of *Clostridium perfringens* and can result in life-threatening infection

