## How Processing Affects Your Bird's Food – and Their Health

This material is intended to educate consumers about the difference between our Gold Standard extruded diet (nuggets) and our newest addition, Harrison's Organic Premium Pellets - HOPP.

We have attached technical data for both our Gold Standard extruded maintenance formula and the new HOPP pellet. While nutritional content is important, the source, bioavailability of nutrients, and processing methods used can significantly influence a product's effectiveness.

Food formulation is often considered both a science and an art. Even the most carefully formulated food is only as effective as the processing it undergoes. Whether through pelleting or extrusion, processing is a nutritional decision that directly affects nutrient availability and digestibility.

Processing alters the physical structure of ingredients, impacting how they're absorbed in the digestive tract. For example, heat treatments like extrusion or toasting can deactivate antinutritional factors in soy, enhancing amino acid digestibility. However, excessive heat may damage sensitive vitamins or cause Maillard reactions, reducing lysine availability.

Coarse particle size provides benefits, such as improving excrement consistency, and may also have a protective effect against pathogens by reducing hindgut pH.

The quality of raw ingredients, condition of equipment, and expertise of the processing team all impact the final product. In fact, two foods with identical formulations can produce dramatically different results depending on how they're processed.

# HARRISON'S ADULT LIFETIME COARSE EXTRUDED NUGGETS



# HARRISON'S ORGANIC PREMIUM PELLETS PELLETS



### How Processing Affects Your Bird's Food – and Their Health

With over 50 years of scientific and practical experience, our extruded diets—like Adult Lifetime Coarse—are made from whole, intact ingredients, precisely ground to support gut health. These are then carefully extruded to maximize nutrient availability while avoiding overheating. This level of control and quality contributes to the higher cost of both raw materials and the finished product.

Pelleting, by contrast, is a simpler and more cost-effective process that does not fully cook the ingredients, potentially reducing nutrient availability. In some pellet production—not HOPP—the use of untested grains can also increase the risk of mycotoxin contamination.

#### WHERE TO BUY HARRISON'S:

www.harrisonsbirdfoods.com

### Harrisons ADULT LIFETIME COARSE

Composition	As Fed	100% dry matter	Units
Metabolizable Energy	3,249	3,551	kcal/kg
Moisture	8.5		%
Protein	16.64	18.18	%
Fat	8.34	9.12	%
Ash	3.56	3.89	%
Crude Fiber	4.04	4.41	%
Carbohydrates	58.92	64.4	%
FATTY ACIDS			
- Total Omega-6 Fatty Acids	2.65	2.89	%
- Total Omega-3 Fatty Acids	0.38	0.42	%
MINERALS			
- Calcium	0.47	0.52	%
- Phosphorus	0.4	0.44	%
- Magnesium	0.16	0.18	%
- Potassium	0.65	0.72	%
- Sodium	0.05	0.06	%
- Iron	82.7	90.3	mg/kg
- Zinc	45.1	49.3	mg/kg
- Manganese	50	54.7	mg/kg
- Copper	8.7	9.5	mg/kg
VITAMINS			
- Vitamin A	3,097	3,384	IU/kg
- Vitamin D3	877	959	IU/kg
- Vitamin E	239	262	IU/kg

We developed HOPP in response to customer demand for a certified organic, nutritionally balanced, more cost-effective pellet that contains no peanuts, soy or corn (allergens) and complements our extruded diets. Bird owners were blending conventional pellets with our extruded products, which can compromise both the nutritional profile and the benefits of a fully organic regimen. HOPP offers a complete, balanced, certified organic alternative that works seamlessly alongside our extruded formulas for adult birds.

Please note: HOPP is not recommended for special needs birds. This includes birds that are under one year of age, recovering from illness, molting, breeding, or elderly. These birds have higher nutritional requirements and should be fed a Harrison's High Potency formula to ensure optimal support.

#### WHERE TO BUY HOPP:

Ask your veterinarian or favorite pet retailer.

### **HOPP Harrison's Organic Premium Pellets**

Composition	As Fed	100% dry matter	Units
Metabolizable Energy	2,990	3,375	kcal/kg
Moisture	8.5		%
Protein	16.9	19.1	%
Fat	5.6	6.3	%
Ash	5.9	6.7	%
Crude Fiber	5.2	5.9	%
Carbohydrates	54.9	62.0	%
FATTY ACIDS			
- Total Omega-6 Fatty Acids	1.61	1.82	%
- Total Omega-3 Fatty Acids	1.7	1.92	%
MINERALS			
- Calcium	0.90	1.02	%
- Phosphorus	0.70	0.79	%
- Magnesium	0.25	0.28	%
- Potassium	0.70	0.79	%
- Zinc	109.0	123.0	mg/kg
- Manganese	106.0	119.6	mg/kg
- Copper	13.4	15.1	mg/kg
VITAMINS			.0
- Vitamin A	4,365	4,927	IU/kg
- Vitamin D3	1615	1,823	IU/kg
- Vitamin E	27	30	IU/kg