

*The  
Connecticut  
Agricultural  
Experiment  
Station,  
New Haven*

**Feed Products  
and Pet Foods  
Inspected 1990**

BY LESTER HANKIN

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Results of chemical analyses of 388 official samples of feed products and pet foods collected during 1990 by inspectors of the Connecticut Department of Agriculture are presented in this Bulletin. Feeds for farm animals as well as for pets, including caged and wild birds, were tested.

Table 1 shows individual samples from 48 manufacturers. In the Table the brand name for individual products from each manufacturer is followed by the percentage guarantee for the nutrients, protein, fat, fiber, and ash. For example, the numbers 10, 8, 4, 2 indicate that a minimum of 10% protein, a minimum of 8% fat, a maximum of 4% fiber, and a maximum of 2% ash are guaranteed. The analyses are then shown with deficiencies in protein and fat followed by a dash (-).

Table 2 summarizes the number of samples from each manufacturer and the number of guarantees for ash. The number of guarantees for protein, fat, and fiber is the same as the number of samples. The average percentage for each nutrient for each manufacturer is then shown.

Two types of variability affect feed and pet food analysis and must be considered in judging deficiencies. The first is the variability among different batches of the same product. This variability can be noted by examination of the results of analyses of the same product from the same manufacturer. The second type of variability is among duplicate analyses on the same product. This variability is shown by the statement: the mean difference between duplicates for protein, fat, fiber, and ash is about three-tenths percent.

Feed and pet foods are deemed deficient in protein and fat and excessive in fiber and ash if the analysis is not within analytical variations recommended by the Association of American Feed Control Officials. For all samples, only nine, or 2.3%, were found to be deficient in protein content, and eight samples, or 2.1%, were deficient in fat. No samples contained an excess of fiber or ash.

Analyses were by Mamie Pyles, Craig Musante, and David Stilwell. Samples were collected by Melanie Attwater, Raymond Weller and Alton VanDyke under the direction of Alton VanDyke, Feed Control Official of the Department of Agriculture. Feed laws are administered by the Commissioner of the Connecticut Department of Agriculture.

Lester Hankin  
Chief, Analytical Chemistry

Table 1. Analysis of individual samples.

|  | Guarantee % |      |       | Ash | Nutrients found % |     |       |     |
|--|-------------|------|-------|-----|-------------------|-----|-------|-----|
|  | Prot.       | Fat  | Fiber |     | Prot.             | Fat | Fiber | Ash |
| AGWAY, INC.  |             |      |       |     |                   |     |       |     |
| Agway Choice for Horses                            | 12          | 2    | 20    |     | 13.6              | 4.0 | 13.5  |     |
| Agway Choice Horse Food                            | 12          | 2    | 20    |     | 13.6              | 4.3 | 12.2  |     |
| Agway Country Chicken Grower                       | 14.5        | 3.5  | 4     |     | 15.1              | 3.8 | 3.4   |     |
| Agway Country Chicken Grower (med)                 | 14.5        | 3.5  | 4     |     | 16.9              | 3.2 | 2.8   |     |
| Agway Country Chicken Starter                      | 18          | 3    | 4     |     | 18.1              | 4.8 | 3.6   |     |
| Agway Country Egg Layer                            | 16          | 3    | 4     |     | 16.5              | 4.3 | 4.2   |     |
| Agway Country Egg Layer                            | 16          | 3    | 4     |     | 16.0              | 3.9 | 2.7   |     |
| Agway Country Egg Layer                            | 16          | 3    | 4     |     | 16.6              | 3.7 | 3.2   |     |
| Agway Country Egg Layer                            | 16          | 3    | 4     |     | 17.4              | 3.6 | 2.8   |     |
| Agway Country Game & Turkey Breeder                | 18          | 3    | 4.5   |     | 19.1              | 2.8 | 1.6   |     |
| Agway Country Poultry Finisher                     | 16          | 3    | 8     |     | 16.9              | 3.5 | 3.1   |     |
| Agway Crunchy Pro Right 16 for Ruminants           | 16          | 3    | 7     |     | 15.4              | 6.1 | 5.2   |     |
| Agway Early Market Lamb Pellets                    | 14          | 2    | 18    |     | 14.3              | 2.5 | 16.4  |     |
| Agway Gro Pak (med)                                | 10          | 1    | 9     |     | 12.9              | 3.7 | 4.1   |     |
| Agway Gro Right Complete Calf 1                    | 15          | 2    | 23    |     | 15.2              | 4.1 | 14.4  |     |
| Agway Gro Right Complete Calf 1 (Bov)( med)        | 15          | 2    | 23    |     | 16.1              | 2.1 | 16.7  |     |
| Agway Hi Energy Lamb Pellets                       | 16          | 3.5  | 9     |     | 16.2              | 4.1 | 6.6   |     |
| Agway Hi Energy Lamb Pell (B.U.) w/Fish Meal (med) | 16          | 3.5  | 9     |     | 18.1              | 3.2 | 8.0   |     |
| Agway Llama Pellet                                 | 13          | 2.5  | 17    |     | 14.1              | 3.7 | 12.7  |     |
| Agway Mare 'N' Foal                                | 18          | 2.5  | 7.5   |     | 19.5              | 3.9 | 5.8   |     |
| Agway Milk Right 16 (N.U.)                         | 16          | 2.5  | 12    |     | 16.6              | 3.9 | 5.2   |     |
| Agway Milk Right 20 (N.U.)                         | 20          | 2.5  | 12    |     | 19.8              | 3.7 | 6.2   |     |
| Agway Nu-Cashmaker 18 for Laying Chickens          | 18          | 3    | 4     |     | 19.9              | 3.8 | 3.6   |     |
| Agway Performance for Horses                       | 14          | 3    | 10    |     | 15.4              | 3.1 | 5.7   |     |
| Agway Pro Lean 14% Hog Feed                        | 14          | 3    | 5     |     | 14.9              | 5.3 | 2.9   |     |
| Agway Pro Lean 16% Sow & Pig Feed                  | 16          | 3    | 5.5   |     | 17.4              | 3.2 | 2.5   |     |
| Agway Pro Lean 42% Hog Concentrate                 | 42          | 2    | 5     |     | 40.9              | 2.9 | 3.3   |     |
| Agway Pro Lean Pig Starter Plus (MX)(med)          | 18          | 4.5  | 4.5   |     | 20.4              | 4.1 | 2.0   |     |
| Agway Pro Lean Squealer Pellets (MX)(med)          | 18          | 4    | 3     |     | 18.9              | 6.1 | 1.4   |     |
| Agway Pro Right 40 for Ruminants                   | 40          | 0.75 | 5     |     | 40.3              | 1.7 | 3.6   |     |
| Agway Pro Right RC 20                              | 20          | 3    | 6.5   |     | 20.6              | 3.7 | 3.8   |     |
| Agway Ratio Right 16                               | 16          | 3    | 7     |     | 16.6              | 3.4 | 6.5   |     |
| Agway Ratio Right 16                               | 16          | 3    | 7     |     | 15.5              | 5.1 | 5.7   |     |
| Agway Ratio Right 16 for Ruminants                 | 16          | 3    | 3     |     | 16.6              | 2.8 | 4.8   |     |
| Agway Ratio Right 20 for Ruminants                 | 20          | 3    | 7     |     | 21.9              | 4.9 | 6.2   |     |
| Agway Super Fit-N-Fresh                            | 13          | 3    | 8.5   |     | 15.4              | 5.6 | 5.2   |     |
| Agway Trim   | 14          | 2.5  | 10    |     | 15.9              | 3.6 | 5.3   |     |
| Agway Trim for Horses                              | 14          | 2.5  | 10    |     | 15.3              | 3.9 | 5.6   |     |
| ALLIED FOODS, INC.                                 |             |      |       |     |                   |     |       |     |
| Calo Complete Original Flavor Cat Food             | 8           | 2    | 1.5   |     | 8.5               | 3.4 | 0.8   |     |
| Calo Complete Original Flavor Dog Food             | 8           | 1.5  | 1.5   |     | 8.3               | 8.4 | 0.9   |     |
| ALPO PET FOODS, INC.                               |             |      |       |     |                   |     |       |     |
| Alpo Beef & Cheese Dinner for Dogs                 | 9           | 5    | 1.5   |     | 9.6               | 5.8 | 0.9   |     |
| Alpo Beef Chunks Dinner for Dogs                   | 9           | 6    | 1.5   |     | 13.1              | 5.8 | 0.4   |     |
| Alpo Chicken Dinner for Dogs                       | 9           | 7    | 1.5   |     | 9.9               | 7.1 | 0.5   |     |
| Alpo Horsemeat Chunks & Beef By-Prod Dinner Dogs   | 9           | 5    | 1.5   |     | 10.8              | 7.5 | 0.4   |     |
| Alpo Premium Cat Food Beef and Liver Banquet       | 11          | 5    | 1     | 2.5 | 12.1              | 7.2 | 0.4   | 2.8 |
| Alpo Premium Cat Food Beef and Liver Prime Banquet | 11          | 5    | 1     | 2.5 | 11.8              | 5.4 | 0.3   | 2.6 |

Table 1. Analysis of individual samples.

|  | Guarantee % |     |       |     | Nutrients found % |      |       |     |
|--|-------------|-----|-------|-----|-------------------|------|-------|-----|
|  | Prot.       | Fat | Fiber | Ash | Prot.             | Fat  | Fiber | Ash |
| Alpo Premium Cat Food Beef Prime Banquet           | 11          | 5   | 1     | 2.5 | 11.1              | 10.2 | 1.3   | 2.1 |
| Alpo Premium Cat Food Ocean Whitefish Treat        | 11          | 4   | 1     | 3   | 12.8              | 4.9  | 0.4   | 3.2 |
| Alpo Premium Cat Food Prime Captain's Table        | 11          | 4   | 1     | 3   | 13.1              | 6.4  | 0.4   | 2.5 |
| Alpo Premium Cat Fd Prime Liver & Chick Banquet    | 11          | 5   | 1     | 2.5 | 12.7              | 9.9  | 0.6   | 2.0 |
| Alpo Premium Cat Food Prime Ocean Whitefish Treat  | 11          | 4   | 1     | 3   | 13.5              | 7.6  | 0.4   | 2.9 |
| Alpo Premium Cat Fd Prime Salmon & Shrimp Treat    | 11          | 4   | 1     | 3   | 12.3              | 5.1  | 0.4   | 1.9 |
| Alpo Premium Cat Food Prime Savory Grill           | 11          | 5   | 1     | 2.5 | 11.2              | 7.0  | 0.8   | 1.9 |
| Alpo Premium Cat Food Robust Stew                  | 10          | 4   | 1     | 2.5 | 13.3              | 6.3  | 1.3   | 2.3 |
| Alpo Premium Cat Food Salmon and Shrimp Treat      | 11          | 4   | 1     | 3   | 13.1              | 9.0  | 0.5   | 2.1 |
| Alpo Premium Cat Fd Turkey & Giblets Prime Banquet | 10          | 6   | 1     | 2.5 | 11.5              | 7.6  | 0.4   | 1.8 |
| Alpo Snaps   | 19          | 2.5 | 2.5   |     | 24.5              | 3.4  | 2.1   |     |
| <b>BAY-MOR PET FEEDS</b>                           |             |     |       |     |                   |      |       |     |
| Bay Mor YC 250                                     | 12          | 2   | 5     |     | 12.8              | 3.6  | 2.2   |     |
| Bay Mor YC 450                                     | 14          | 2   | 5     |     | 15.1              | 2.9  | 2.9   |     |
| Bay-Mor PC-800 Pigeon Feed                         | 13          | 2   | 5     |     | 13.3              | 2.9  | 3.4   |     |
| Bay-Mor YC 450 Pigeon Feed                         | 8           | 2   | 1.5   |     | 8.0               | 5.8  | 0.9   |     |
| Bay-Mor YC-150 Pigeon Feed                         | 10          | 2   | 5     |     | 9.6               | 3.4  | 2.3   |     |
| <b>BEST FEEDS &amp; FARM SUPPLIES</b>              |             |     |       |     |                   |      |       |     |
| Joy Dog Food Special Meal                          | 26          | 10  | 4     | 10  | 27.6              | 9.6  | 1.8   | 7.0 |
| <b>BLUE SEAL FEEDS</b>                             |             |     |       |     |                   |      |       |     |
| Blue Seal A-1 Pigeon Feed                          | 12          | 2   | 5     |     | 12.4              | 2.5  | 5.1   |     |
| Blue Seal Avi Pel for Zoo Avians                   | 20          | 4.5 | 4     |     | 21.6              | 5.3  | 4.3   |     |
| Blue Seal Beet Pulp Pelleted                       | 7           | 0.3 | 22    |     | 10.1              | 0.8  | 20.0  |     |
| Blue Seal Broiler Crumbles CB                      | 21          | 6.5 | 3     |     | 23.8              | 7.5  | 3.1   |     |
| Blue Seal Broiler Crumbles-CB Medicated            | 21          | 6.5 | 3     |     | 21.1              | 6.0  | 3.0   |     |
| Blue Seal Bunny 16 Rabbit Pellets                  | 16          | 2.5 | 18    |     | 19.6              | 3.8  | 17.0  |     |
| Blue Seal Bunny 16 Rabbit Pellets                  | 16          | 2.5 | 18    |     | 17.3              | 4.4  | 16.3  |     |
| Blue Seal Contender Horse Feed Pellets             | 16          | 3   | 7.5   |     | 16.4              | 3.8  | 7.1   |     |
| Blue Seal Contender Horse Feed Pellets             | 16          | 3   | 7.5   |     | 17.0              | 4.3  | 7.0   |     |
| Blue Seal Demand Horse Pellet w/High Fat           | 16          | 6.5 | 6.5   |     | 18.3              | 6.6  | 6.5   |     |
| Blue Seal Dog Biscuits Assorted Small              | 24          | 7   | 3     |     | 26.7              | 9.3  | 1.5   |     |
| Blue Seal Fat & Finish Pellets                     | 18          | 4.5 | 3.5   |     | 18.4              | 5.1  | 3.7   |     |
| Blue Seal Fat & Finish Pellets                     | 18          | 4.5 | 3.5   |     | 19.8              | 4.6  | 3.3   |     |
| Blue Seal Game Bird Crumbles                       | 20          | 4.5 | 4     |     | 20.4              | 5.3  | 4.2   |     |
| Blue Seal Game Bird Crumbles                       | 20          | 4.5 | 4     |     | 20.3              | 5.0  | 3.0   |     |
| Blue Seal Gentry                                   | 30          | 20  | 4     |     | 29.3              | 19.3 | 2.0   |     |
| Blue Seal Gentry Premium Formula Dog Food          | 30          | 20  | 4     |     | 30.0              | 18.4 | 4.0   |     |
| Blue Seal Grower-Cal Mash                          | 15          | 3   | 4     |     | 17.1              | 3.2  | 3.5   |     |
| Blue Seal Grower-Cal Pellets                       | 15          | 3   | 4     |     | 16.1              | 2.8  | 2.7   |     |
| Blue Seal Guinea Pig Pellets w/added Vit. C        | 20          | 4   | 16    |     | 21.8              | 4.4  | 14.5  |     |
| Blue Seal Hi-Pro 20 Pel Rabbit Pellets             | 20          | 2.5 | 12    |     | 22.1              | 4.0  | 9.5   |     |
| Blue Seal Horse 1 Horse Feed                       | 10          | 2.5 | 7     |     | 11.6              | 4.8  | 4.6   |     |
| Blue Seal Hutch 18 Pels Rabbit Feed                | 18          | 2.5 | 15    |     | 19.1              | 4.0  | 14.5  |     |
| Blue Seal Kat Kare Cat Food                        | 30          | 9   | 3.5   |     | 30.1              | 11.6 | 1.4   |     |
| Blue Seal Kat Kare Cat Food                        | 30          | 9   | 3.5   |     | 31.5              | 9.4  | 1.8   |     |
| Blue Seal Kat Krunchies Cat Food                   | 30          | 9   | 4     |     | 30.3              | 11.3 | 1.7   |     |
| Blue Seal Krunchies Dog Food                       | 21          | 8   | 4     |     | 21.7              | 7.3  | 2.8   |     |
| Blue Seal Lamb BT Pellets Medicated                | 18          | 3.5 | 7     |     | 18.8              | 3.5  | 6.2   |     |
| Blue Seal Lamb BT Pellets Medicated                | 18          | 3.5 | 7     |     | 18.3              | 3.5  | 3.5   |     |

Table 1. Analysis of individual samples.

|   | Guarantee % |     |       | Nutrients found % |       |      |       |     |
|---|-------------|-----|-------|-------------------|-------|------|-------|-----|
|   | Prot.       | Fat | Fiber | Ash               | Prot. | Fat  | Fiber | Ash |
| Blue Seal Lamb Finisher Pellets                   | 15          | 3.5 | 7     |                   | 16.5  | 4.0  | 6.6   |     |
| Blue Seal Lamb Starter-Grower Pellets             | 18          | 3.5 | 7     |                   | 20.3  | 4.1  | 3.5   |     |
| Blue Seal Layer Mash                              | 15          | 3   | 4     |                   | 16.4  | 5.8  | 3.6   |     |
| Blue Seal Layer Pellets                           | 15          | 3   | 4     |                   | 16.4  | 4.0  | 4.1   |     |
| Blue Seal Milk Maker 16 Dairy Pellets             | 16          | 3   | 8.5   |                   | 16.7  | 4.5  | 8.3   |     |
| Blue Seal Milk Maker 16 Dairy Pellets             | 16          | 3   | 8.5   |                   | 17.3  | 4.9  | 8.9   |     |
| Blue Seal Milk Maker 20 Dairy Pellets             | 20          | 3   | 8.5   |                   | 20.2  | 4.4  | 7.5   |     |
| Blue Seal Natural 26 Dog Food                     | 26          | 10  | 4     |                   | 25.9  | 9.7  | 2.6   |     |
| Blue Seal Natural 26 Dog Food                     | 26          | 10  | 4     |                   | 25.5  | 11.5 | 2.4   |     |
| Blue Seal Nip 'N' Tuck                            | 18          | 6   | 7     |                   | 20.1  | 5.5  | 4.7   |     |
| Blue Seal Pig & Sow Pellets                       | 15          | 3.5 | 7     |                   | 16.6  | 3.5  | 6.0   |     |
| Blue Seal Pig & Sow Pellets                       | 15          | 3.5 | 7     |                   | 16.3  | 4.5  | 6.7   |     |
| Blue Seal Scratch Feed                            | 9           | 2.5 | 5     |                   | 9.3   | 5.0  | 2.9   |     |
| Blue Seal Songmaker                               | 11          | 8   | 10    |                   | 11.1  | 8.0  | 6.2   |     |
| Blue Seal Strider Horse Feed Pellet               | 11          | 2.5 | 7     |                   | 11.5  | 3.2  | 7.0   |     |
| Blue Seal Trotter Complete Horse Ration Pellets   | 14          | 2   | 20    |                   | 16.1  | 3.7  | 20.6  |     |
| Blue Seal Trotter Complete Pellets                | 14          | 2   | 20    |                   | 16.1  | 3.4  | 9.5   |     |
| Blue Seal Turkey Grower Pellets (med)             | 20          | 4.5 | 4     |                   | 20.2  | 5.0  | 4.0   |     |
| Blue Seal Turkey/Game Bird Starter Crumbles (med) | 28          | 4.5 | 4     |                   | 30.3  | 4.5  | 3.0   |     |
| Blue Seal Turkey/Game Bird Starter Crumbles (med) | 28          | 4.5 | 4     |                   | 27.2  | 5.6  | 2.3   |     |
| Blue Seal Ultra 27 Dog Food                       | 27          | 15  | 4     |                   | 27.3  | 16.2 | 1.9   |     |
| Blue Seal Ultra 27 Dog Food                       | 27          | 15  | 4     |                   | 27.3  | 14.7 | 3.2   |     |
| Blue Seal Veal Formula                            | 20          | 20  | 0.2   |                   | 21.9  | 18.0 | 0.1   |     |
| BUMBLE BEE SEAFOODS, INC.                         |             |     |       |                   |       |      |       |     |
| Figaro Cat Food Tuna                              | 18          | 2   | 1     | 3                 | 19.1  | 7.3  | 0.3   | 1.6 |
| CADILLAC PET FOODS, INC.                          |             |     |       |                   |       |      |       |     |
| Special Diet Formulation O Dietary Pet Food       | 7           | 2   | 5     | 2.5               | 6.8   | 2.6  | 4.3   | 2.4 |
| CARGILL, INC.                                     |             |     |       |                   |       |      |       |     |
| Nutrena 18% Rabbit Pellets                        | 18          | 2.5 | 17    |                   | 18.8  | 4.2  | 16.5  |     |
| Nutrena Bloomfield 16% Dairy Feed                 | 16          | 3   | 8     |                   | 17.1  | 3.0  | 5.3   |     |
| Nutrena Chick Starter (ABF) Medicated             | 20          | 3   | 4     | 7                 | 20.0  | 2.9  | 2.9   | 5.6 |
| Nutrena Egg Producer Meal                         | 16          | 3   | 4.5   |                   | 16.6  | 4.0  | 4.1   |     |
| Nutrena Excel 16 Dairy                            | 16          | 2.5 | 10    |                   | 15.8  | 5.3  | 9.1   |     |
| Nutrena Gold Flake Calf Starter (BLP)             | 18          | 3   | 7     |                   | 18.4  | 3.6  | 3.2   |     |
| Nutrena Horse Kwik Ration w/Roughage Pellets      | 12.5        | 2   | 20    |                   | 14.3  | 4.3  | 12.6  |     |
| Nutrena Pig & Hog (T20) Pellets                   | 15          | 2.5 | 7     |                   | 15.4  | 4.4  | 3.5   |     |
| Nutrena Pig & Hog Feed                            | 15          | 2.5 | 7     |                   | 14.7  | 5.8  | 5.0   |     |
| Nutrena Triumph 12 Horse Feed                     | 12          | 2.5 | 13    | 8                 | 12.3  | 4.1  | 6.8   | 6.2 |
| Nutrena Triumph 14 Horse Feed                     | 14          | 2.5 | 12.5  |                   | 14.1  | 3.9  | 4.5   |     |
| Nutrena Vitality 12 Sweet Feed                    | 12          | 3   | 7     |                   | 12.7  | 3.0  | 2.8   |     |
| Nutrena Vitality 14                               | 14          | 3   | 6     |                   | 14.8  | 4.1  | 4.7   |     |
| Nutrena Vitality Horse Kwik Ration                | 12.5        | 2   | 20    |                   | 17.5  | 5.8  | 17.8  |     |
| Nutrena Vitality Pellets Milk Plus                | 28          | 3   | 3     |                   | 30.0  | 2.8  | 1.7   |     |
| CARNATION CO./PET CARE PRODUCTS DIV.              |             |     |       |                   |       |      |       |     |
| Bright Eyes Beef & Chicken Flavor Cat Food        | 9           | 3   | 1     | 2.3               | 9.9   | 7.6  | 0.3   | 2.8 |
| Bright Eyes Seafood Flavor Cat Food               | 9           | 3   | 1     | 2.5               | 10.8  | 7.1  | 0.3   | 2.7 |
| Friskies Buffet Mariner's Catch for Cats          | 12          | 5   | 1     | 3                 | 12.8  | 5.7  | 0.2   | 2.1 |
| Friskies Buffet Prime Entree for Cats             | 11          | 5   | 1     | 2.5               | 12.9  | 5.2  | 0.2   | 2.8 |

Table 1. Analysis of individual samples.

|   | Guarantee % |      |       |     | Nutrients found % |      |       |     |
|---|-------------|------|-------|-----|-------------------|------|-------|-----|
|   | Prot.       | Fat  | Fiber | Ash | Prot.             | Fat  | Fiber | Ash |
| Friskies Buffet Tuna & Kidney Dinner for Cats   | 12          | 4    | 1     | 3.5 | 12.8              | 8.7  | 0.3   | 2.1 |
| Grand Gourmet London Grill for Dogs             | 10          | 2    | 1     |     | 11.3              | 3.6  | 0.4   |     |
| Grand Gourmet with Chunky Beef for Dogs         | 10          | 2    | 1     |     | 13.7              | 3.2  | 0.5   |     |
| Mighty Dog Sliced Beef in Gravy                 | 12          | 2    | 1     |     | 12.9              | 3.9  | 0.2   |     |
| Mighty Dog Sliced Turkey in Gravy               | 12          | 2    | 1     |     | 12.5              | 3.5  | 0.3   |     |
| New Friskies Kitten Formula Beef Formula        | 12.5        | 4.5  | 1     | 3   | 13.4              | 12.8 | 0.6   | 2.2 |
| New Friskies Kitten Formula Mixed Grill Formula | 12          | 5    | 1     | 2.5 | 14.3              | 8.1  | 0.1   | 2.4 |
| New Friskies Kitten Formula Seafood Formula     | 14          | 3    | 1     | 3.5 | 16.4              | 5.6  | 0.3   | 3.0 |
| DERBY FEED CO.                                  |             |      |       |     |                   |      |       |     |
| Country Pride Deluxe Blend Wild Bird Food       | 10          | 3    | 17    |     | 13.7              | 17.6 | 9.0   |     |
| Country Pride Finch Mix                         | 15          | 10   | 17    |     | 15.6              | 15.1 | 6.4   |     |
| Country Pride Standard Mix Wild Bird Food       | 10          | 3    | 14    |     | 11.8              | 6.3  | 12.1  |     |
| Snow Bird Wild Bird Feed                        | 9           | 3    | 9     |     | 10.3              | 5.1  | 2.7   |     |
| DOANE PRODUCTS CO.                              |             |      |       |     |                   |      |       |     |
| Promark Professional Cat Diet Formula 3010      | 30          | 10   | 4     | 5.5 | 30.2              | 9.3  | 1.8   | 5.5 |
| Promark Professional Dog Diet Formula 3020      | 30          | 20   | 3     | 8.5 | 30.0              | 17.4 | 2.8   | 8.0 |
| Promark Professional Puppy Diet Formula 2710    | 27          | 10   | 4     |     | 27.4              | 10.5 | 2.4   |     |
| H. K. WEBSTER CO., INC.                         |             |      |       |     |                   |      |       |     |
| Blue Seal Bunny 16 Pellets                      | 16          | 2.5  | 18    |     | 17.9              | 3.7  | 14.9  |     |
| Blue Seal Bunny Pel 16                          | 16          | 2.5  | 18    |     | 19.4              | 4.3  | 13.9  |     |
| Blue Seal Calf Starter                          | 19          | 3    | 8     |     | 20.9              | 3.8  | 4.9   |     |
| Blue Seal Coarse Cracked Corn                   | 8.5         | 2.5  | 2.5   |     | 9.0               | 5.2  | 1.5   |     |
| Blue Seal Contender Horse Feed                  | 16          | 3.5  | 7.5   |     | 16.6              | 4.2  | 6.4   |     |
| Blue Seal Game Bird Crumbles                    | 20          | 4.5  | 4     |     | 19.2              | 4.7  | 3.2   |     |
| Blue Seal Gentry Dog Food                       | 30          | 20   | 4     |     | 31.5              | 17.9 | 2.6   |     |
| Blue Seal Grower Cal Mash                       | 15          | 3    | 4     |     | 16.3              | 4.4  | 3.4   |     |
| Blue Seal Hi Pro 20 Pellets Rabbit              | 20          | 2.5  | 12    |     | 20.9              | 3.4  | 11.3  |     |
| Blue Seal Lamb Starter Grower Pellets           | 18          | 3.5  | 7     |     | 18.8              | 3.9  | 3.0   |     |
| Blue Seal Layer Mash                            | 15          | 3    | 4     |     | 15.3              | 3.1  | 3.8   |     |
| Blue Seal Layer Pellets                         | 15          | 3    | 4     |     | 16.2              | 3.1  | 4.1   |     |
| Blue Seal Milk Maker 16 Dairy Pellets           | 16          | 3    | 8.5   |     | 18.7              | 3.9  | 8.8   |     |
| Blue Seal Natural 40 Dairy Pellets              | 40          | 1    | 5     |     | 37.2              | 2.7  | 3.7   |     |
| Blue Seal Pig/Sow Pellets                       | 15          | 3.5  | 7     |     | 14.8              | 3.9  | 5.0   |     |
| Blue Seal Pork Maker Mash                       | 13          | 3.5  | 7     |     | 14.7              | 4.0  | 5.5   |     |
| Blue Seal Puppy Food Formula 28                 | 28          | 10   | 4     |     | 30.4              | 10.4 | 3.1   |     |
| Blue Seal Scratch Feed                          | 9           | 2.5  | 5     |     | 10.4              | 4.1  | 3.9   |     |
| Blue Seal Smith 14 Horse Feed                   | 14          | 2.5  | 12.5  |     | 15.8              | 3.2  | 10.4  |     |
| Blue Seal Trotter                               | 14          | 2.5  | 20    |     | 18.2              | 4.1  | 10.3  |     |
| Blue Seal Trotter Horse Pellets                 | 14          | 2.5  | 20    |     | 16.0              | 6.4  | 11.6  |     |
| Blue Seal Turkey Game Bird Starter Crumbles     | 20          | 4.5  | 4     |     | 28.8              | 5.7  | 2.7   |     |
| Blue Seal Wheat Bran                            | 14          | 3.5  | 12    |     | 16.6              | 3.6  | 12.1  |     |
| HEINOLD FEEDS, INC.                             |             |      |       |     |                   |      |       |     |
| Square Deal 15-20 Show Formula Rabbit Food      | 15          | 3    | 20    |     | 17.6              | 3.7  | 13.1  |     |
| Square Deal 16% Sheep Pellet                    | 16          | 4    | 5.75  |     | 17.3              | 4.2  | 6.4   |     |
| Square Deal 17-17 Family Formula Rabbit Feed    | 17          | 2.5  | 17    |     | 18.8              | 2.9  | 12.3  |     |
| Square Deal 38% Dairy Supplement                | 38          | 1.75 | 8     |     | 40.1              | 2.8  | 5.3   |     |
| Square Deal Chunk Style Dog Food                | 21          | 8    | 4.5   |     | 22.4              | 9.3  | 2.8   |     |

Table 1. Analysis of individual samples.

|  | Guarantee % |     |       |     | Nutrients found % |      |       |     |
|--|-------------|-----|-------|-----|-------------------|------|-------|-----|
|  | Prot.       | Fat | Fiber | Ash | Prot.             | Fat  | Fiber | Ash |
| <b>HEINZ PET PRODUCTS CO.</b>                        |             |     |       |     |                   |      |       |     |
| 9 Lives Ground Cat Food Salmon Supreme Entree        | 10          | 4.5 | 1     | 3.5 | 14.4              | 9.1  | 0.3   | 3.2 |
| 9 Lives Morsels Cat Food Chicken Dinner              | 10          | 3.5 | 1     | 2.5 | 11.9              | 6.8  | 0.4   | 1.9 |
| 9 Lives Morsels Cat Food Liver Entree                | 10          | 2   | 1     | 2   | 10.9              | 5.2  | 0.1   | 1.6 |
| 9 Lives Morsels Cat Food Ranch Supper                | 10          | 3   | 1     | 2.5 | 13.7              | 3.8  | 0.1   | 2.3 |
| 9 Lives Morsels Cat Food Sea & Shore Supper          | 10          | 2   | 1     | 3   | 11.7              | 2.9  | 0.4   | 1.6 |
| 9 Lives Morsels Cat Food Tender Veal & Cheese Dinner | 10          | 3   | 1     | 2.5 | 11.1              | 4.1  | 0.4   | 2.2 |
| Amore Braised Liver Dinner for Cats                  | 11          | 2   | 1     | 2.5 | 17.5              | 4.2  | 0.2   | 3.4 |
| Amore Diced Veal Dinner for Cats                     | 10          | 2   | 1     | 3   | 11.7              | 4.2  | 0.1   | 1.7 |
| Amore Flaked Salmon Dinner for Cats                  | 15          | 5   | 1     | 3   | 15.6              | 5.2  | 0.1   | 1.7 |
| Amore Ocean Whitefish & Tuna Dinner for Cats         | 17.5        | 3.5 | 1     | 3   | 20.8              | 3.5  | 0.2   | 2.9 |
| Amore Seafood & Chicken Platter Dinner for Cats      | 12          | 6   | 1     | 4   | 12.2              | 8.4  | 0.2   | 1.9 |
| Amore Simmered Beef Dinner for Cats                  | 10          | 2   | 1     | 2.5 | 10.6              | 5.7  | 0.3   | 1.7 |
| Kozy Kitten Cat Fd Ctry Mix/Chick/Meat/Milk Flavor   | 30          | 8   | 4.5   |     | 32.1              | 8.4  | 3.5   |     |
| New Skippy Premium Poultry Grill for Dogs            | 8           | 3   | 1.5   |     | 11.1              | 2.7  | 0.9   |     |
| New Skippy Premium Smoky Beef Dinner for Dogs        | 8           | 3   | 1     |     | 8.6               | 2.9  | 0.9   |     |
| New Skippy Premium Turkey & Bacon Dinner for Dogs    | 8           | 3   | 1.5   |     | 10.3              | 3.9  | 1.0   |     |
| Recipe Chicken & Cheese Dinner for Dogs & Puppies    | 8           | 5   | 1.5   |     | 9.9               | 5.2  | 0.8   |     |
| Recipe Chunky Turkey Dinner for Dogs & Puppies       | 8           | 5   | 1.5   |     | 10.5              | 5.3  | 0.6   |     |
| Recipe Hearty Meat Dinner for Dogs & Puppies         | 8           | 5   | 1.5   |     | 9.8               | 5.0  | 0.7   |     |
| Vets Braised Liver Flavor Dog Food                   | 8           | 2   | 1.5   |     | 8.0               | 5.8  | 0.9   |     |
| <b>HILL'S PET PRODUCTS</b>                           |             |     |       |     |                   |      |       |     |
| Hill's Science Diet Canine Growth                    | 26          | 17  | 2     | 5   | 27.3              | 16.0 | 1.9   | 7.3 |
| Zu/Preem Primate Dry                                 | 20          | 5   | 2.5   | 5.5 | 23.8              | 6.3  | 2.1   | 4.7 |
| <b>JOHN RENICK CO.</b>                               |             |     |       |     |                   |      |       |     |
| Magna Elite 30/20 Professional Canine Diet           | 30          | 20  | 3     |     | 32.9              | 18.7 | 1.9   |     |
| <b>K &amp; L FEED MILL CORP.</b>                     |             |     |       |     |                   |      |       |     |
| Arbor Acres Custom 20% Lite Breeder Crumbles         |             |     |       |     | 21.7              | 3.8  | 2.7   |     |
| K & L 16% Dairy Ration Pellets                       | 16          | 3   | 8     |     | 17.1              | 3.8  | 5.3   |     |
| K & L 16% Layer                                      | 16          | 3   | 4     |     | 17.6              | 3.5  | 3.7   |     |
| K & L Avian Quick Grower Pellets                     | 18          | 3   | 4     |     | 21.2              | 3.5  | 3.3   |     |
| K & L Broiler Finisher                               | 18          | 4   | 3     |     | 19.2              | 4.2  | 2.4   |     |
| K & L Chick Grower                                   | 13.5        | 3   | 4.5   |     | 14.8              | 3.6  | 2.9   |     |
| K & L Chick Starter                                  | 19.5        | 3   | 4     |     | 21.2              | 3.1  | 3.2   |     |
| K & L Custom Blend                                   |             |     |       |     | 25.1              | 6.3  | 5.7   |     |
| K & L Duck Developer Pellets                         | 15          | 3   | 4     |     | 18.1              | 2.7  | 3.8   |     |
| K & L Energizer Horse Feed Pellets                   | 11.5        | 4.5 | 8     |     | 14.7              | 4.6  | 5.7   |     |
| K & L G2175 Custom                                   |             |     |       |     | 18.1              | 3.5  | 2.5   |     |
| K & L Goat 13% Pellets                               | 13          | 3   | 9     |     | 15.9              | 4.3  | 7.7   |     |
| K & L Pig Grower Pellets                             | 15          | 3   | 4     |     | 15.1              | 2.8  | 2.7   |     |
| K & L Sow Feed Pellets                               | 12          | 3   | 5     |     | 13.1              | 3.3  | 2.9   |     |
| K & L Turkey Finisher                                | 13          | 3   | 4.5   |     | 14.5              | 3.1  | 2.2   |     |
| K & L Turkey Grower                                  | 18          | 3   | 4     |     | 19.5              | 3.8  | 3.2   |     |
| <b>KAL KAN FOODS, INC.</b>                           |             |     |       |     |                   |      |       |     |
| Kal Kan Pedigree Stew with Chunky Beef               | 8           | 6   | 1.5   |     | 9.1               | 8.6  | 0.5   |     |
| Kal Kan Whiskas Catfish Dinner                       | 8           | 5   | 1.5   | 3   | 9.0               | 9.5  | 0.3   | 2.2 |
| Kal Kan Whiskas Salmon Dinner                        | 8           | 5   | 1.5   | 3   | 11.8              | 9.1  | 0.4   | 2.4 |
| Kal Kan Whiskas Seaside Supper                       | 8           | 5   | 1.5   | 3   | 9.7               | 8.7  | 0.2   | 3.3 |

Table 1. Analysis of individual samples.

|  | Guarantee % |     |       |     | Nutrients found % |      |       |     |
|--|-------------|-----|-------|-----|-------------------|------|-------|-----|
|  | Prot.       | Fat | Fiber | Ash | Prot.             | Fat  | Fiber | Ash |
| New Whiskas Cat Food Chunks in Gravy with Beef         | 8           | 3   | 1     |     | 11.8              | 3.1  | 0.3   |     |
| New Whiskas Fd Cats Chunks in Gravy w/Beef & Liver     | 8           | 3   | 1     |     | 13.8              | 3.0  | 0.2   |     |
| New Whiskas Fd Cats Chunks in Gravy w/Turkey           | 8           | 3   | 1     |     | 10.4              | 4.3  | 0.3   |     |
| Pedigree Kal Kan Stew with Chunky Beef                 | 8           | 6   | 1.5   |     | 8.5               | 7.3  | 0.9   |     |
| Sheba Chicken Entree Tender Meaty Chunks for Cats      | 11          | 5   | 1     | 3   | 11.4              | 4.7  | 0.4   | 1.7 |
| Sheba Salmon Entree Tender Moist Chunks for Cats       | 11          | 5   | 1     | 3   | 14.6              | 7.6  | 0.5   | 2.7 |
| Sheba Whitefish Entree Tender Moist Chunks for Cats    | 11          | 5   | 1     | 3   | 12.9              | 4.6  | 0.4   | 3.3 |
| <b>KELLY FOODS CORP.</b>                               |             |     |       |     |                   |      |       |     |
| Bil-Jac Cat Food                                       | 31          | 18  | 3.5   | 6.5 | 31.4              | 22.6 | 2.3   | 3.9 |
| Bil-Jac Lite Dog Food                                  | 17          | 10  | 5     |     | 19.1              | 12.7 | 2.3   |     |
| Bil-Jac Puppy Food                                     | 28          | 18  | 4     |     | 30.0              | 18.2 | 2.3   |     |
| Bil-Jac Select Dog Food                                | 27          | 17  | 4     |     | 27.8              | 21.2 | 2.9   |     |
| <b>LICK YOUR CHOPS, INC.</b>                           |             |     |       |     |                   |      |       |     |
| Lick Your Chops for Kittens & Cats                     | 31          | 15  | 4     | 4.5 | 32.7              | 14.4 | 2.8   | 4.6 |
| <b>MANNA PRO CORP.</b>                                 |             |     |       |     |                   |      |       |     |
| Manna Pro Calf-Manna Conc Ration for All Animals       | 8           | 1.5 | 1.5   | 10  | 8.3               | 8.4  | 0.9   | 1.6 |
| Manna Pro Classic Adult Dog Food                       | 22          | 10  | 3.5   |     | 23.5              | 10.0 | 2.2   |     |
| Manna Pro Elite 14                                     | 14          | 8   | 7.5   |     | 15.5              | 9.9  | 7.0   |     |
| Manna Pro Small World Smorgasbird Wild Bird Feast      | 10          | 3   | 1     |     | 11.1              | 5.4  | 0.2   |     |
| Manna Pro Trip-L-Duty All Purpose Poultry Feed         | 15          | 3   | 10    |     | 16.4              | 4.6  | 9.4   |     |
| <b>MARTHA WHITE FOODS, INC.</b>                        |             |     |       |     |                   |      |       |     |
| Bonkers Cat Treats Real Chicken                        | 25          | 10  | 1     |     | 26.4              | 16.2 | 1.0   |     |
| Bonkers Cat Treats Real Seafood                        | 25          | 10  | 1     |     | 27.7              | 16.8 | 1.1   |     |
| <b>MIDWESTERN PET FOODS</b>                            |             |     |       |     |                   |      |       |     |
| Pro Pac 22 Total Fitness Diet for Dogs                 | 22          | 11  | 5     |     | 24.3              | 11.0 | 2.4   |     |
| Pro Pac 26 Kennel Pack Diet for Dogs                   | 26          | 15  | 4     |     | 27.4              | 16.0 | 2.1   |     |
| Pro Pac 28 Super Premium Puppy Food                    | 28          | 20  | 4     | 8   | 31.2              | 18.4 | 2.2   | 8.0 |
| Pro Pac 30 High Performance Diet for Dogs              | 30          | 20  | 3     |     | 31.7              | 19.1 | 2.1   |     |
| <b>MURRAY ELEVATOR</b>                                 |             |     |       |     |                   |      |       |     |
| Silver Cup Soft Moist Fish Fd Trout/Salmon Fry No. 1   | 44          | 16  | 3     | 12  | 47.5              | 20.5 | 0.2   | 9.4 |
| Silver Cup Soft Moist Fish Fd Trout/Salmon Fry Starter | 44          | 16  | 3     | 12  | 50.3              | 19.4 | 0.2   | 9.8 |
| <b>NATURAL LIFE PET PRODUCTS, INC.</b>                 |             |     |       |     |                   |      |       |     |
| Natural Life Adult Dog Formula                         | 26          | 12  | 3.5   |     | 28.9              | 11.9 | 2.0   |     |
| Natural Life Condition Dog Formula                     | 28          | 18  | 3.5   |     | 28.4              | 16.0 | 2.3   |     |
| Natural Life Puppy Dog Formula                         | 28          | 15  | 3.5   |     | 32.6              | 14.4 | 2.2   |     |
| Natural Life Puppy Dog Formula                         | 28          | 15  | 3.5   |     | 31.6              | 14.1 | 2.6   |     |
| Natural Life Senior Dog Formula                        | 18          | 8   | 4     |     | 21.4              | 8.3  | 2.1   |     |
| Natural Life Senior Dog Formula                        | 18          | 8   | 4     |     | 20.5              | 8.2  | 1.3   |     |
| <b>NATURES RECIPE</b>                                  |             |     |       |     |                   |      |       |     |
| Natures Recipe Lamb and Rice Kibble Dog Food           | 20          | 10  | 4.4   |     | 20.7              | 10.3 | 4.3   |     |
| Natures Recipe Optimum Feline Diet                     | 30          | 10  | 4     | 6   | 30.0              | 11.0 | 2.1   | 6.3 |
| Natures Recipe Puppy Performance & Lactation Diet      | 25          | 15  | 4.5   |     | 26.3              | 16.7 | 3.2   |     |
| <b>NUTRO PRODUCTS, INC.</b>                            |             |     |       |     |                   |      |       |     |
| Nutro Max Cat Lite                                     | 32          | 12  | 6     | 6.5 | 31.6              | 13.0 | 2.9   | 6.6 |
| Nutro Max Kibble Puppy Food                            | 28          | 17  | 4     |     | 29.8              | 16.0 | 4.3   |     |
| Nutro Max Kitten                                       | 34          | 20  | 3     | 7   | 37.3              | 17.4 | 1.7   | 6.2 |



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|   | Guarantee % |     |       |     | Nutrients found % |       |       |     |
|---|-------------|-----|-------|-----|-------------------|-------|-------|-----|
|   | Prot.       | Fat | Fiber | Ash | Prot.             | Fat   | Fiber | Ash |
| Nutro Max Special                                 | 16          | 8   | 4.5   |     | 19.7              | 8.3   | 2.6   |     |
| Nutro Maximum Nutrition Kibble Dog Food           | 26          | 16  | 4     |     | 27.5              | 17.0  | 4.2   |     |
| Nutro Nat Choice Lamb Meal & Rice Form Dog Food   | 21          | 12  | 5     |     | 22.3              | 12.5  | 3.0   |     |
| Nutro Premium Nutrition Kibble Dog Food           | 25          | 12  | 4.5   |     | 26.1              | 12.5  | 3.1   |     |
| PET NUTRITIONAL SYSTEMS                           |             |     |       |     |                   |       |       |     |
| Nutrix Lite Cat Blend                             | 30          | 6   | 4     | 7   | 41.0              | 8.3   | 3.0   | 8.7 |
| Nutrix Lite Dog Blend                             | 22          | 8   | 5     |     | 22.9              | 10.3  | 1.9   |     |
| Nutrix Performance Blend                          | 30          | 20  | 4     |     | 30.4              | 15.0- | 3.2   |     |
| Nutrix Performance Blend                          | 30          | 20  | 4     |     | 31.7              | 16.1- | 3.4   |     |
| Nutrix Puppy Blend                                | 28          | 18  | 4     |     | 30.5              | 13.4- | 3.2   |     |
| Nutrix Puppy Food                                 | 28          | 18  | 4     |     | 28.1              | 13.6- | 2.7   |     |
| PET SPECIALTIES, INC.                             |             |     |       |     |                   |       |       |     |
| ANF 24 Adult Formula Dog Food                     | 24          | 13  | 2.5   | 8.5 | 25.0              | 12.7  | 1.3   | 6.7 |
| ANF 30 Performance Formula Dog Food               | 30          | 18  | 3.5   | 9   | 32.0              | 16.7  | 2.1   | 7.9 |
| ANF M Maintenance Formula Dog Food                | 22          | 13  | 2.5   | 8.5 | 23.7              | 12.0  | 1.8   | 7.0 |
| PRO PET, INC.                                     |             |     |       |     |                   |       |       |     |
| Big Red Nuggets for Dogs                          | 21          | 8   | 5.5   |     | 21.3              | 7.6   | 3.9   |     |
| Big Red Producer's Choice 18                      | 18          | 2   | 15    |     | 18.8              | 4.1   | 14.6  |     |
| Big Red Rabbits Choice                            | 15          | 2   | 18    |     | 15.4              | 3.6   | 19.1  |     |
| QUAKER OATS CO.                                   |             |     |       |     |                   |       |       |     |
| Gaines Beef Flavor Cycle 1 Dog Food               | 10          | 6   | 2     |     | 11.2              | 5.6   | 0.5   |     |
| Gaines Chicken Flavor Cycle 2 Dog Food            | 9           | 4   | 2     |     | 10.7              | 5.5   | 0.6   |     |
| Gaines Chicken Flavor Cycle 3 Dog Food            | 7           | 2   | 5     |     | 7.7               | 2.1   | 1.8   |     |
| Gaines Chicken Flavor Cycle 4 Dog Food            | 5           | 3   | 5     |     | 5.8               | 2.7   | 2.5   |     |
| King Kuts Premium Dog Food with Real Beef & Liver | 10          | 3   | 1     |     | 11.8              | 5.7   | 0.4   |     |
| RALSTON PURINA CO.                                |             |     |       |     |                   |       |       |     |
| AVN Parrot Formula                                | 20          | 7   | 4     | 6   | 20.1              | 7.3   | 2.9   | 6.3 |
| Pro Plan Dog Food Lite Formula                    | 14          | 8   | 5.5   |     | 14.7              | 8.8   | 3.3   |     |
| Pro Plan Dog Food Lite Formula (Dry)              | 14          | 8   | 5.5   |     | 14.7              | 9.2   | 0.6   |     |
| Purina Bird Chow                                  | 8.5         | 2.5 | 3     | 2.5 | 12.0              | 5.8   | 0.5   | 2.4 |
| Purina Bird Mix                                   | 8           | 1.5 | 4.5   |     | 9.4               | 2.1   | 1.9   |     |
| Purina Goat Chow                                  | 16          | 2.5 | 9     |     | 18.6              | 4.0   | 5.0   |     |
| Purina Grain Land Alfalfa Cubes                   | 15          | 1.5 | 30    |     | 19.1              | 2.8   | 18.7  |     |
| Purina Grain Land Coarse Cracked Corn             | 8           | 3.5 | 3     |     | 11.3              | 9.0   | 0.3   |     |
| Purina Horse Chow #100                            | 10          | 2   | 30    |     | 15.7              | 3.5   | 23.5  |     |
| Purina Horse Chow #200                            | 14          | 2   | 25    |     | 15.9              | 3.8   | 19.9  |     |
| Purina New England Pride Horse Pellet 16          | 16          | 2.5 | 10    |     | 16.3              | 2.7   | 10.3  |     |
| Purina Premium Beef 'N Bacon Platter for Cats     | 11.5        | 3   | 1     | 3   | 14.6              | 8.9   | 0.2   | 1.8 |
| Purina Premium Chicken & Liver Dinner for Cats    | 11.5        | 4   | 1     | 3.5 | 12.8              | 6.2   | 0.2   | 2.1 |
| Purina Premium Country Dinner for Cats            | 11          | 3   | 1     | 4   | 12.3              | 8.5   | 0.4   | 3.0 |
| Purina Pro Plan Dog Food                          | 28          | 18  | 3     |     | 28.8              | 18.5  | 3.0   |     |
| Purina Pro Plan Dog Food Blend Adult Formula      | 25          | 15  | 3     |     | 25.8              | 14.4  | 1.9   |     |
| Purina Pro Plan Dog Food Blend Growth Formula     | 28          | 18  | 3     |     | 28.6              | 17.3  | 3.2   |     |
| Purina Pro Plan Dog Food Growth Formual (Dry)     | 28          | 18  | 3     |     | 28.4              | 17.3  | 1.1   |     |
| Purina Pro Plan Dog Food Performance Formula      | 30          | 20  | 3     |     | 31.2              | 18.7  | 11.1  |     |
| Purina Puppy Chow                                 | 27          | 9   | 5     |     | 28.2              | 10.5  | 2.2   |     |
| Purina Pure Pride Horse Feed 100                  | 10          | 2.5 | 12    |     | 13.8              | 4.3   | 9.6   |     |
| Purina Pure Pride Horse Feed 200                  | 14          | 2.5 | 8     |     | 14.3              | 4.1   | 8.1   |     |

Table 1. Analysis of individual samples.

|   | Guarantee % |     |       |     | Nutrients found % |      |       |     |
|---|-------------|-----|-------|-----|-------------------|------|-------|-----|
|   | Prot.       | Fat | Fiber | Ash | Prot.             | Fat  | Fiber | Ash |
| Purina Sunflower Blend                            | 15          | 34  | 32    |     | 19.1              | 37.9 | 18.7  |     |
| Purina Turkey Grower NT                           | 20          | 3   | 5.5   |     | 21.3              | 4.3  | 4.8   |     |
| Purina Wild Bird Chow                             | 10          | 3   | 7     | 2.5 | 11.3              | 6.3  | 0.2   | 2.6 |
| ROYAL GRAIN CO.                                   |             |     |       |     |                   |      |       |     |
| Handler's Choice Golden Nuggets                   | 21          | 8   | 8     |     | 21.9              | 14.9 | 5.1   |     |
| STANFORD SEED CO.                                 |             |     |       |     |                   |      |       |     |
| Lyric Extra Wildbird Food                         | 11          | 10  | 10    |     | 19.1              | 14.0 | 8.0   |     |
| Lyric Wild Bird Food Peanut Hearts                | 20          | 40  | 5     |     | 32.4              | 46.4 | 4.2   |     |
| STOP & SHOP                                       |             |     |       |     |                   |      |       |     |
| Stop & Shop Beef & Liver Dinner Cat Food          | 11          | 6   | 1     | 3   | 12.2              | 8.2  | 0.5   | 2.5 |
| Stop & Shop Beef Dinner Cat Food                  | 12          | 5   | 1     | 3.2 | 12.9              | 10.8 | 0.5   | 1.9 |
| Stop & Shop Chopped Grill Dinner Gourmet Cat Food | 11.5        | 6   | 1     | 2.7 | 12.6              | 8.7  | 0.6   | 1.4 |
| Stop & Shop Country Chick Dinner Gourm Cat Fd     | 12          | 5   | 1     | 3.2 | 12.9              | 7.5  | 0.4   | 1.8 |
| Stop & Shop Horsemeat & Chunks Dinner for Dogs    | 11          | 5   | 1.5   |     | 12.1              | 6.4  | 0.4   |     |
| Stop & Shop Lamb Chunks Dinner for Dogs           | 10          | 6   | 1.5   |     | 11.1              | 7.6  | 0.5   |     |
| Stop & Shop Seafood Dinner Cat Food               | 12          | 5.5 | 1     | 3   | 12.9              | 6.4  | 0.3   | 2.9 |
| Stop & Shop Tuna & Egg Dinner Cat Food            | 14          | 2   | 1     | 3   | 17.9              | 2.8  | 0.2   | 1.7 |
| Stop & Shop Turkey & Giblets Dinner Gourm Cat Fd  | 13          | 6   | 1     | 2.9 | 13.0              | 7.3  | 0.4   | 1.8 |
| Sun Glory Beef Flavor Dog Food                    | 8           | 2   | 1.5   |     | 8.9               | 1.9  | 1.3   |     |
| Sun Glory Chicken Flavor Dog Food                 | 8           | 1.5 | 1.5   |     | 9.1               | 1.6  | 1.3   |     |
| Sun Glory Liver Flavor Dog Food                   | 8           | 2   | 1.5   |     | 9.8               | 3.6  | 1.3   |     |
| SUN SEED  |             |     |       |     |                   |      |       |     |
| Sun Seed Canary Mix                               | 17          | 12  | 10    |     | 18.0              | 15.0 | 5.7   |     |
| Sun Seed Rabbit Pellets                           | 18          | 2   | 20    |     | 21.8              | 3.4  | 8.8   |     |
| Sun Seed Southern Cockatiel Mix                   | 14          | 12  | 20    |     | 12.5-             | 13.0 | 10.0  |     |
| SUNFLOWER, INC.                                   |             |     |       |     |                   |      |       |     |
| Feathered Friend Bird Snack Wild Bird Mixture     | 11          | 6   | 10.5  |     | 13.6              | 8.0  | 6.8   |     |
| Feathered Friend Flyers Choice Wild Bird Food Mix | 14          | 20  | 12    |     | 15.0              | 24.9 | 11.0  |     |
| Feathered Friend Sunflower Hearts for Wild Birds  | 22          | 38  | 8     |     | 25.3              | 35.5 | 2.9   |     |
| Feathered Friends Favorite Wild Bird Food Mixture | 10.5        | 4   | 8     |     | 12.5              | 4.4  | 4.8   |     |
| SWEETLIFE FOODS                                   |             |     |       |     |                   |      |       |     |
| Sweet Life Beef Chunks Dinner for Dog             | 11          | 5   | 1.5   |     | 12.9              | 8.0  | 0.4   |     |
| Sweet Life Chopped Chicken Dinner for Dogs        | 9           | 8   | 1.5   |     | 10.8              | 11.4 | 0.3   |     |
| Sweet Life Horsemeat Chunks Dinner for Dogs       | 11          | 5   | 1.5   |     | 11.0              | 7.1  | 0.6   |     |
| Sweet Life Lamb Chunks Dinner for Dogs            | 11          | 7   | 1.5   |     | 11.4              | 6.9  | 0.2   |     |
| THE IAMS CO.                                      |             |     |       |     |                   |      |       |     |
| Eukanuba Adult Maintenance Dog Food Dry           | 25          | 16  | 5     |     | 26.3              | 16.4 | 2.1   |     |
| Eukanuba Dog Food                                 | 30          | 20  | 4     |     | 31.8              | 20.1 | 2.2   |     |
| Iams Cat Food                                     | 32          | 21  | 3     | 6.5 | 33.4              | 19.3 | 3.0   | 6.2 |
| Iams Chunks Dog Food                              | 26          | 15  | 5     |     | 26.8              | 15.0 | 2.4   |     |
| Iams Less Active for Cats                         | 28          | 14  | 3     | 6.5 | 30.6              | 14.9 | 1.4   | 5.8 |
| Iams Less Active for Cats Cat Food                | 28          | 14  | 3     | 6.5 | 30.6              | 14.5 | 3.0   | 5.9 |
| Iams Less Active for Dogs                         | 22          | 12  | 5     |     | 23.3              | 12.6 | 2.5   |     |
| Iams Mini Chunks Dog Food                         | 20          | 15  | 5     |     | 26.3              | 13.5 | 2.7   |     |

Table 1. Analysis of individual samples.

|  | Guarantee % |      |       |      | Nutrients found % |      |       |      |
|--|-------------|------|-------|------|-------------------|------|-------|------|
|  | Prot.       | Fat  | Fiber | Ash  | Prot.             | Fat  | Fiber | Ash  |
| <b>THE ROBERT ABADY DOG FOOD CO., LTD.</b>   |             |      |       |      |                   |      |       |      |
| Abady High Stress & Competition Formula      | 25          | 19   | 0.5   | 10   | 19.3-             | 21.3 | 0.8   | 8.9  |
| Abady Maintenance & Stress Dog Food          | 26          | 15.5 | 1     | 10   | 23.9-             | 18.2 | 1.1   | 10.8 |
| <b>TOPCO ASSOCIATES, INC.</b>                |             |      |       |      |                   |      |       |      |
| Mega Dog Food Chicken Flavor                 | 8           | 1.5  | 1.5   |      | 8.9               | 1.4  | 1.0   |      |
| Mega Dog Food Liver Flavor                   | 8           | 1.5  | 1.5   |      | 8.5               | 1.5  | 1.1   |      |
| Topco Chicken Dinner for Cats                | 10          | 9    | 1     | 3.5  | 13.9              | 10.0 | 0.1   | 2.4  |
| Topco Mackerel & Chicken Cat Food            | 12          | 6    | 1     | 3.5  | 12.7              | 8.1  | 0.1   | 2.6  |
| Topco Tuna & Kidney Dinner Cat Food          | 12          | 5    | 1     | 3    | 13.6              | 14.2 | 0.7   | 2.1  |
| Topco Tuna Cat Food                          | 19          | 2    | 1     | 2.5  | 21.4              | 11.0 | 0.1   | 1.4  |
| <b>TRIUMPH PET INDUSTRIES</b>                |             |      |       |      |                   |      |       |      |
| Triumph Hi-Tor Adult Dog Food (Dry)          | 26          | 15   | 5     |      | 22.4-             | 14.4 | 4.0   |      |
| Triumph Hi-Tor Adult Dog Food (Dry)          | 26          | 15   | 5     |      | 22.0-             | 14.2 | 3.3   |      |
| Triumph Hi-Tor Dog Food (Dry)                | 25          | 12   | 4     |      | 27.3              | 14.2 | 2.6   |      |
| Triumph Hi-Tor Lite Dog Food                 | 21          | 6    | 4     |      | 21.3              | 7.4  | 5.7   |      |
| Triumph Hi-Tor Lite Dog Food (Dry)           | 21          | 6    | 4     |      | 21.7              | 6.5  | 4.3   |      |
| Triumph Hi-Tor Puppy Food                    | 28          | 17   | 4     |      | 29.2              | 16.3 | 4.5   |      |
| Triumph Hi-Tor Puppy Food (Dry)              | 28          | 17   | 4     |      | 28.1              | 15.8 | 3.3   |      |
| Triumph Hi-Tor Puppy Food (Dry)              | 28          | 17   | 4     |      | 27.4              | 15.3 | 3.2   |      |
| Triumph Supreme Feline Diet                  | 32          | 20   | 3     | 5.25 | 41.5              | 21.1 | 1.6   | 5.5  |
| Triumph Supreme Feline Diet-Chicken Flavor   | 32          | 20   | 3     | 5.25 | 38.5              | 19.5 | 1.3   | 5.5  |
| Triumph Supreme Feline Diet-Seafood Flavor   | 32          | 20   | 3     | 5.25 | 39.9              | 18.2 | 1.9   | 5.8  |
| <b>UNITED CO-OPERATIVE FARMERS</b>           |             |      |       |      |                   |      |       |      |
| Tizwhiz High Quality Horse Feed              | 8           | 2.5  | 1.5   |      | 8.5               | 3.4  | 0.8   |      |
| UCF Complete Layer Mash                      | 15          | 3    | 5     |      | 15.6              | 10.7 | 4.3   |      |
| UCF Complete Layer Pelleted                  | 15          | 3    | 9     |      | 15.6              | 5.1  | 4.5   |      |
| UCF Pride Horse Pellets                      | 13          | 2    | 15    |      | 12.7              | 5.4  | 15.1  |      |
| UCF Purrsonality Cat Food                    | 30          | 9    | 4.5   | 5.5  | 32.4              | 10.5 | 1.5   | 4.3  |
| UCF Rabbit Feed Pelleted                     | 17          | 3    | 17    |      | 17.0              | 4.9  | 15.3  |      |
| UCF Show 'N Grow Dry Dog Food                | 27          | 10   | 4.5   |      | 28.2              | 10.8 | 3.3   |      |
| UCF Turkey Grower (med.) Pelleted            | 20          | 3    | 5.5   |      | 20.6              | 5.3  | 2.5   |      |
| UCF Turkey Grower Pelleted                   | 20          | 3    | 5.5   |      | 22.3              | 2.8  | 2.4   |      |
| UCF Wild Bird Food Original Blend            | 10          | 2    | 4.6   |      | 11.4              | 8.2  | 4.9   |      |
| UCF Wild Bird Food Select Blend              | 15          | 15   | 17    |      | 15.1              | 19.8 | 9.9   |      |
| <b>VENTURA GRAIN CO., INC.</b>               |             |      |       |      |                   |      |       |      |
| Every Day Formula 1400 Horse Feed            | 14          | 2.5  | 20    |      | 15.5              | 3.2  | 11.4  |      |
| <b>WAUREGAN GRAIN CO., INC.</b>              |             |      |       |      |                   |      |       |      |
| Wauregan                                     | 15          | 3    | 4     |      | 15.9              | 4.4  | 4.2   |      |
| Wauregan                                     | 18          | 3    | 9     |      | 21.1              | 3.8  | 5.7   |      |
| Wauregan 16% Pork Maker Plus                 | 16          | 3    | 4.5   |      | 16.8              | 4.5  | 3.1   |      |
| Wauregan 16% Pork Maker Plus                 | 16          | 3    | 4.5   |      | 17.1              | 4.4  | 4.5   |      |
| Wauregan Calf Starter Texturized             | 20          | 3    | 8     |      | 20.1              | 3.5  | 5.5   |      |
| Wauregan Equine's Choice Complete Horse Feed | 14          | 2.5  | 20    |      | 14.1              | 3.2  | 15.7  |      |
| Wauregan Equine's Choice Complete Horse Feed | 14          | 2.5  | 20    |      | 14.8              | 2.7  | 19.4  |      |
| Wauregan Heifer Grower Pellets Medicated     | 16          | 3    | 8     |      | 17.1              | 5.0  | 6.3   |      |
| Wauregan Horse Oats                          | 10          | 3    | 12    |      | 10.3              | 4.4  | 10.6  |      |
| Wauregan Layer                               | 15          | 3    | 4     |      | 16.9              | 3.7  | 2.6   |      |

Table 1. Analysis of individual samples.

|  | Guarantee % |     |       |     | Nutrients found % |      |       |     |
|--|-------------|-----|-------|-----|-------------------|------|-------|-----|
|  | Prot.       | Fat | Fiber | Ash | Prot.             | Fat  | Fiber | Ash |
| Wauregan Rabbit Pellets                          | 20          | 2.5 | 18    |     | 18.6              | 4.0  | 17.8  |     |
| Wauregan Trail Ride Horse Feed Pellets           | 12          | 3   | 9     |     | 12.8              | 5.3  | 7.9   |     |
| Wauregan Trail Ride Horse Feed Pellets           | 12          | 3   | 9     |     | 12.8              | 3.0  | 9.0   |     |
| Wauregan Turkey-Game Bird Grower                 | 22          | 3.5 | 4.5   |     | 22.2              | 3.7  | 2.9   |     |
| WELLES L. BISHOP CO.                             |             |     |       |     |                   |      |       |     |
| Suet cakes                                       | 8           | 35  | 7     |     | 6.4               | 36.2 | 7.7   |     |
| WELLS PET FOOD CORP.                             |             |     |       |     |                   |      |       |     |
| Sportmix Chunk Style Dog Food                    | 21          | 8   | 5     |     | 21.3              | 9.6  | 4.0   |     |
| ZEIGLER BROS., INC.                              |             |     |       |     |                   |      |       |     |
| Ziegler CT High Performance 42% Trout Food 3/16" | 42          | 12  | 4     | 15  | 42.3              | 12.0 | 1.8   | 8.1 |
| Ziegler CT High Performance 42% Trout Food 5/32" | 42          | 12  | 4     | 15  | 42.4              | 12.8 | 3.7   | 7.6 |

Table 2. Summary for each manufacturer of number of samples tested, number of guarantees for ash, and average percentage of guarantee for each nutrient.

| Manufacturer            | Samples <sup>a</sup><br>(guarantees<br>for ash) | Average percent of guarantee |     |       | Ash |
|-------------------------|---|------------------------------|-----|-------|-----|
|                         |   | Protein                      | Fat | Fiber |     |
| Agway                   | 38(0)   | 107                          | 148 | 70    | -   |
| Allied Foods            | 2(0)  | 105                          | 365 | 57    | -   |
| Alpo Pet Products       | 17(12)  | 117                          | 147 | 56    | 87  |
| Bay-Mor Pet Feeds       | 5(0)  | 103                          | 186 | 55    | -   |
| Best Feeds              | 1(0)  | 106                          | 96  | 45    | -   |
| Blue Seal Feeds         | 52(0)   | 107                          | 127 | 80    | -   |
| Bumble Bee Seafoods     | 1(1)  | 106                          | 365 | 30    | 53  |
| Cadillac Pet Foods      | 1(1)  | 97                           | 130 | 86    | 96  |
| Cargill                 | 15(2)   | 106                          | 160 | 67    | 79  |
| Carnation               | 12(8)   | 114                          | 189 | 31    | 91  |
| Derby Feed              | 4(0)  | 118                          | 279 | 52    | -   |
| Doane Products          | 3(2)  | 101                          | 95  | 66    | 97  |
| H.K. Webster            | 23(0)   | 111                          | 141 | 77    | -   |
| Heinold Feeds           | 5(0)  | 110                          | 124 | 76    | -   |
| Heinz Pet Products      | 20(12)  | 120                          | 157 | 39    | 79  |
| Hill's Pet Products     | 2(2)  | 112                          | 110 | 90    | 116 |
| John Renick             | 1(0)  | 110                          | 94  | 63    | -   |
| K & L Feed Mill         | 16(0)   | 112                          | 112 | 75    | -   |
| Kal Kan Foods           | 11(6)   | 128                          | 136 | 33    | 87  |
| Kelly Foods             | 4(1)  | 106                          | 120 | 60    | 60  |
| Lick Your Chops         | 1(1)  | 106                          | 96  | 70    | 102 |
| Manna Pro               | 5(1)  | 108                          | 223 | 66    | 16  |
| Martha White Foods      | 2(0)  | 108                          | 165 | 105   | -   |
| Midwestern Pet Foods    | 4(1)  | 108                          | 99  | 56    | 100 |
| Murray Elevator         | 2(2)  | 111                          | 125 | 7     | 80  |
| Natural Life Pet Prod.  | 6(0)  | 112                          | 97  | 58    | -   |
| Natures Recipe          | 3(1)  | 103                          | 108 | 74    | 105 |
| Nutro Products          | 7(2)  | 108                          | 101 | 72    | 95  |
| Pet Nutritional Systems | 6(1)  | 110                          | 95  | 71    | 124 |
| Pet Specialties         | 3(3)  | 106                          | 94  | 61    | 83  |
| Pro Pet                 | 3(0)  | 103                          | 160 | 92    | -   |
| Quaker Oats             | 5(0)  | 115                          | 123 | 36    | -   |
| Ralston Purina          | 25(6)   | 115                          | 157 | 69    | 83  |
| Royal Grain             | 1(0)  | 104                          | 186 | 64    | -   |
| Standard Seed           | 2(0)  | 168                          | 128 | 82    | -   |
| Stop & Shop             | 12(7)   | 112                          | 139 | 51    | 67  |
| Sun Seed                | 3(0)  | 105                          | 134 | 50    | -   |
| Sunflower               | 4(0)  | 116                          | 115 | 63    | -   |
| Sweetlife Foods         | 4(0)  | 110                          | 136 | 25    | -   |
| The Iams Co.            | 8(3)  | 109                          | 100 | 62    | 92  |
| Robert Abady Dog Food   | 2(2)  | 85                           | 115 | 135   | 99  |
| Topco Associates        | 6(4)  | 115                          | 212 | 40    | 67  |
| Triumph Pet Industries  | 11(3)   | 106                          | 101 | 82    | 107 |
| United Co-Op Farmers    | 11(1)   | 105                          | 194 | 67    | 78  |
| Ventura Grain           | 1(0)  | 111                          | 128 | 57    | -   |
| Wauregan Grain          | 14(0)   | 105                          | 136 | 83    | -   |
| Welles L. Bishop        | 1(0)  | 80                           | 103 | 110   | -   |
| Wells Pet Food          | 1(0)  | 101                          | 120 | 80    | -   |
| Zeigler Bros.           | 2(2)  | 101                          | 103 | 69    | 52  |

<sup>a</sup> Deficiencies for protein are: two samples each from H.K. Webster, Robert Abady, Triumph Pet Industries, and one each from Sunseed, Wauregan, and Welles L. Bishop.

Deficiencies for fat are: one each from Doane Products, H. K. Webster, Natural Life, Nutro Products, and four from Pet Nutritional Systems.



## The Connecticut Agricultural Experiment Station,

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