



TUCKER TIME

Fuelling your farm's working dogs for optimum performance can involve a food-fight around data, claims and manufacturers' assertions. In this annual round-up **Tim McVeagh** picks through the most recent information.

The latest dog tucker product specs provided by manufacturers are presented in three tables; general information, nutritional data, and ration/cost data.

The basics of farm dog nutrition, as presented in *Country-Wide*, each year remain unchanged.

NOTES FOR TABLE 1

- **AAFCO status:** "Approved" indicates the dog food has passed independent AAFCO testing, is considered non-toxic

and is a complete and balanced diet. "Formulated" indicates good intent to meet AAFCO standards but does not include AAFCO testing. "FEDIAF" indicates the product complies with the European Federation of Pet Food Manufacturers' (FEDIAF) standards. "Exceed" indicates the product exceeds AAFCO standards.

- **Ingredients list:** Ingredients are listed in order of proportion, with

the highest listed first. Only the first three ingredients are listed in this table – in general, where the first is a high-quality ingredient, the shorter the full list, the higher the food quality.

- **Mighty Mix** recommends feeding their frozen concentrate with **Mighty Mix Large Dog Formula**, either together or alternately.
- All products listed are claimed to be "complete and balanced" diets.

Table 1: Summary of general information provided by dog food suppliers

Product name	Type	AAFCO status	Ingredients list (first three only). Listed in order of proportion (highest listed first).	Refrigeration needed?	Made in
Arana Sport and Agility	Kibble	Formulated	Fresh Chicken Meal (16%), Chicken Meal (16%), Turkey Meal (14%)	No	Canada
Champ Max Biscuits	Biscuit	Formulated	Wheat, meat and bone derived from beef and lamb, animal fat.	No	Levin
Chunky Pet Food, Original	Pet Roll	Formulated	Beef, Lamb, Selected Cereals	Once opened	NZ
CopRice Working Dog Food	Kibble	Formulated	Animal Protein meals and by-products (poultry, beef), Natural cereal grains (rice, wheat, sorghum), Rice bran	No	Australia
Country Mile Vitality Biscuit	Biscuit	Formulated	Cereal & cereal by-products, Meat and meat-meal, Animal fat	No	NZ
Country Mile Vitality Kibble	Kibble	Formulated	Wholegrain cereals & cereal meals; Meat and meat by-product meals; Animal fat.	No	Australia
Eukanuba Premium Performance	Kibble	Approved	Chicken, Chicken By-product meal, Corn Meal	No	Nth America
Hill's Science Diet Adult Active	Kibble	Approved	Whole Grain Corn, Chicken By-Product Meal, Animal Fat, Dried Beet Pulp, Flaxseed, Soybean Oil	No	USA

Product name	Type	AAFCO status	Ingredients list (first three only). Listed in order of proportion (highest listed first).	Refrigeration needed?	Made in
K9 Natural Frozen Beef Feast	Frozen Raw	Exceeds	Beef, Beef Blood, Beef Tripe	Yes	NZ
Mighty Mix Large Dog Formula	Biscuit	Formulated	Wholegrain Cereal; Meat Products and Fats (Beef and Sheep);Honey	No	Levin
Mighty Mix Frozen Concentrate	Frozen Concentrate	No	Fats,Meats and products derived from Meat (Beef/Sheep, Pork) Salmon,Wholegrain cereal	Yes	Rienheim
Nutriance Performance	Kibble	Formulated	Chicken meal; Oatmeal, Chicken fat.	No	Canada
PROPLAN All Sizes All Ages Performance with OPTIPOWER	Kibble	Approved	Chicken (dehydrated chicken - natural glucosamine source, chicken), whole grain wheat, animal fat preserved with mixed-tocopherols (form of vitamin E)	No	Australia
Possyum	Pet Roll	Formulated	Possum Meat,Lamb and/or Beef, selected cereals	Once opened	NZ
Royal Canin Endurance 4800	Kibble	FEDIAF	Dehydrated poultry protein, animal fats, rice	No	France
Royal Canin Trail 4300	Kibble	FEDIAF	Dehydrated poultry protein, rice, maize flour	No	France
Tux Energy	Biscuit	Approved	Cereals &/or cereal by-products, meat & animal by products & fats derived from beef/sheep/poultry, goat or venison, natural flavour	No	NZ
Tux Energy Nuts	Kibble	Approved	Wholegrain cereals & cereal &/or vegetable by products; meat & meat by-products &/or poultry by-products, tallow	No	Australia
Ultra Active Working Dog	Kibble	Exceeds	Beef meal, ground corn, dried blood	No	NZ
Wag Original	Dog Roll	Formulated	Chicken, Beef, Lamb	Yes	NZ
Wag Garlic and Rice	Dog Roll	Formulated	Chicken, Lamb, Rice	Yes	NZ

NOTES FOR TABLE 2

Suppliers describe the content of fat, protein and other ingredients in various ways. These may be specific like "20%"; or quite vague such as "at least 20%", "up to 20%" or "20% maximum".

- **Fat content:** Fat provides the energy for endurance work. Guidelines provided by the Veterinary Enterprises Group (VetEnt) indicate dog tucker for hard-working farm dogs should have at least 20% animal fat.
- **Protein content:** Good-quality protein is needed for repair and recovery. VetEnt's recommendation for hard-working farm dogs is a minimum of 30% animal protein.
- **Fibre content:** Fibre is the indigestible carbohydrate portion and as a general rule should not be more than 10%.
- **Carbohydrate content:** Carbohydrates are needed for sprint-type energy.
- **Energy:** Farm dogs get most of their energy from fat. Energy may be quoted as "energy", "gross energy", "digestible energy" or the most relevant, "metabolisable energy (ME)" which is the energy available to the dog. Energy requirements should consider the intensity, frequency and duration of work.

The consensus of most veterinarians is that a working dog's diet should be based on high fat and protein and "low" or "low to moderate" carbohydrate.

- Nutritional data is presented on a drymatter basis.

Table 2: Summary of nutritional information provided by dog food suppliers

Product	Fat (%)	Protein (%)	Fibre (%)	Carbohydrates (%)	Moisture (%)	M Energy kcal/kg
Acana Sport and Agility	22.0	35.00	5.0	18%	12	3725
Champ Max Biscuits	15.0	20	2.0	40.0	10	3200
Chunky Pet Food: Original*	10, min	21, min	1.1, max	62%	No data	4000
CopRice Working Dog Food	15.0	25	4.0	30.0	8	3870
Country Mile Vitality Biscuit	18.0	18	4.0	Not tested	5.0	Not tested
Country Mile Dog Kibble	15.0	20	4.0	No data	No data	Not tested
Eukanuba Premium Performance	20, min	30, min	6% Crude	33.6%	10 Max	3919
Hills Science Diet Adult Active	24.4	28.00	1.7	33.1	7.5	4211
K9 Natural Freeze-Dried Beef Feast	44.9%, crude	35.2%, crude	2.7	3.7	8% max	4792
Mighty Mix Large Dog Formula	12.1	23.28	1.9	42.3	11	3729
Mighty Mix Frozen Concentrate	53.0	25.3	5.1	11.7	31.1	5800
Nutricene Performance	20 min	30 min	3.0 max	23.0	10.0 max	3920
PRO PLAN All Size All Ages Performance with OPTIPOWER	21.0	30.00	4 max	27.0	12.0	3860
Possyum*	8, min	21.5, min	1.09, max	65%	No data	4000
Royal Canin Endurance 4800	30.0	32.00	6.0	15.9	8 Max	4549
Royal Canin Trail 4800	21.0	28.0	7.1	28.3	8 Max	4085
Tux Energy	18.0	20.0	1.7	46.4	8.7	3750
Tux Energy Nuts	16.0	24.0	4.5 max	40.0	7.9	3570
Ultra Active Working Dog	15, min	30, min	4, max	No data	10, max	3187
Wag Original	28.0	39.00	3.7	18.0	Dry Basis	4350
Wag Garlic and Rice	28.0	39.00	3.7	17.0	Dry Basis	4400

* Data quoted on drymatter basis although they are moist foods.

NOTES FOR TABLE 3

A dog's nutritional requirements vary with size, age, workload, reproductive status and climatic conditions.

Daily rations quoted are those recommended by suppliers and may be based on different nutritional assumptions.

Monitoring body condition is the best way to fine-tune ration sizes for a particular food.

It has been considered that farm dogs should ideally have a condition score of 4 on the Nestle Purina Body Condition System, "Ribs easily palpable, with minimal fat covering. Waist easily noted, viewed from above. Abdominal tuck evident".

Work carried out at Massey University is looking at farm dog weight, condition and fat. This work will be covered in next month's *Country-Wide*.

Recommended retail prices given by suppliers may vary from those seen at retailers, and bulk purchasing and specials reduce costs. Actual prices may vary from those in this table. Prices include GST.

Dog food prices can be misleading. Different bag sizes make the price for each bag irrelevant. Price per kilogram also has little relevance because daily rations vary widely between products.

The calculated cost for each dog per day must be balanced against food quality, which should be the major consideration for working dogs.

For hard-working farm dogs, energy is an important factor in assessing rations. A 25kg dog has a resting energy requirement (RER) of about 820kcal per day. For dogs' mustering, it's more likely to be three to five times their RER, equating to about 2500kcal-4000kcal.

This is a wide range but then so is their workload. Knowing the ME of a specific food means a daily energy requirement (DER) can be used to determine the daily ration of a food needed to provide this energy.

* Daily ration (kg) = DER (kcal) / ME (kcal/kg)

For example, the daily ration of a dog food of 4000kcal/kg to provide 2500kcal DER = 2500 / 4000 = 0.625kg or 625g.

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Table 3: Summary of daily rations recommended by dog food suppliers

Product	25kg highly-active dog required/day		Pack/price details	
	Grams of food/day	\$/day	Pack size (kg)	RRP (\$)
Acana Sport and Agility	315	3.01	17	160
Chamix Max Biscuits	510	1.33	25	64.99
Chunky Pet Food, Original	440	1.58	2.2	7.90
CopRice Working Dog Food	510	1.53	20	59.99
Country Mile Vitality Biscuit	500	1.16	25	57.99
Country Mile Dog Kibble	563	1.41	20	49.99
Eukanuba Premium Performance	355	2.48	20	139.90
Hills Science Diet Adult Active	297	2.62	22.67	199.95
K9 Natural Frozen Beef Feast	500	4.87	20	194.99
Mighty Mix Large Dog Formula	352	1.65	20	94.00
Mighty Mix Frozen Concentrate	225	0.85	25	94.00
Mighty Mix Frozen + Large Dog	288.5	1.25	25 + 20	94 + 94
Nutrience Performance	422	4.17	15	148.35
PROPLAN All Sizes All Ages Performance with OPTIPOWER	405	3.14	20	154.90
Possyum	400	2.00	2	9.98
Royal Canin Endurance 4800	550	3.82	20	139.00
Royal Canin Trail 4300	450	3.68	17	139.00
Tux Energy	490	1.50	25	76.50
Tux Energy Nuts	450	1.68	20	74.50
Ultra Active Working Dog	200	1.25	20	125.00
Wag Original	1200	2.96	3	7.39
Wag Garlic and Rice	1200	2.96	3	7.39