EVERYDAY NUTRITION: SUPERIOR NUTRITIONAL PERFORMANCE TO PROMOTE DOGS' OVERALL HEALTH

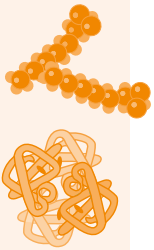
PURINA® PRO PLAN® ADULT Everyday Nutrition products are specially formulated to deliver advanced nutrition through higher digestibility and bioavailability of nutrients, thanks to PURINA®'s proprietary cooking and extrusion process.

Protein is required in canine diets to provide all essential amino acids needed and nitrogen for the synthesis of non-essential amino acids and proteins, other nitrogenous compounds, and as a source of energy. An optimal level of bioavailable amino acids from high quality protein sources is essential for dogs to maintain lean body mass and strengthen muscles, whilst also supporting a healthy skin and coat. A diet rich in high-quality protein also helps support the immune system and the underpinning function of all vital organs.

All products in the PURINA® PRO PLAN® DOG range use a proprietary process to include at least 14% frozen protein sources in their formulas. In the case of Everyday Nutrition products, this source is chicken. The use of high quality chicken in the Everyday Nutrition formulas at optimal levels significantly improves the nutritional quality of the diet leading to lasting health benefits for adult dogs fed this food.

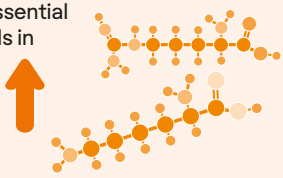
HELPS INCREASE PROTEIN AND FAT DIGESTIBILITY

When comparing dogs fed an otherwise identical diet containing either frozen chicken (FC) or poultry meal (PM) as their only source of animal protein, protein and fat digestibility were significantly better in dogs fed FC[1] compared to the PM diet.

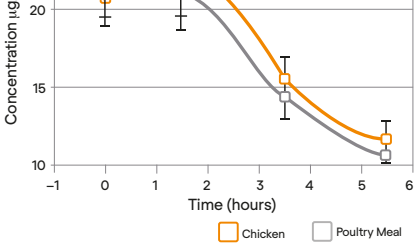


INCREASES THE BIOAVAILABILITY OF AMINO ACIDS

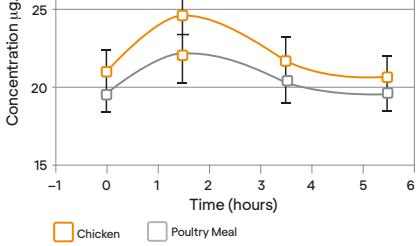
In the same study[1] the dogs fed the diet containing frozen chicken had significantly higher post-prandial blood lysine and arginine levels, indicative of greater bioavailability of these essential amino acids in the FC fed dogs.



BLOOD LYSINE



BLOOD ARGININE



1. Bouthegourd *et al.* (2015) PURINA® report on the impact of inclusion of frozen chicken in dog food on digestibility, bioavailability and body weight maintenance. Nestlé Internal Report.

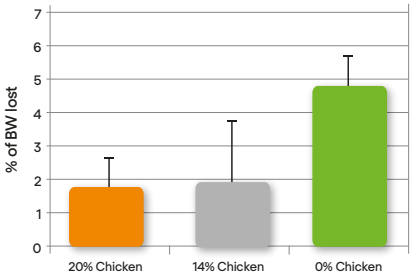
INCREASES THE BODY'S UPTAKE OF ESSENTIAL FATTY ACIDS

In a second study[1], dogs were fed a 25% protein diet containing either 0% or 14% frozen chicken (with the additional protein being supplied by PM). Uptake of the essential fatty acid linoleic acid was significantly higher in the 14% chicken diet due to a better fatty acid profile of this diet (higher linoleic acid content).

HELPS DOGS RESPOND BETTER TO ENVIRONMENTAL STRESS

In the same study[1], dogs fed the 14% frozen chicken diet were better able to maintain their body weight in periods of extreme cold weather compared to dogs given a diet containing only PM. This clearly shows the long term health benefit of providing highly bioavailable essential amino acids and fatty acids in the diet of dogs.

BODY WEIGHT LOST



1. Bouthegourd *et al.* (2015) PURINA® report on the impact of inclusion of frozen chicken in dog food on digestibility, bioavailability and body weight maintenance. Nestlé Internal Report.

LARGE ROBUST AND ATHLETIC DOGS: A UNIQUE AND PATENTED* APPROACH TO LARGE BREED NUTRITION

The nutritional needs of large dogs depend on many factors including: their genetic origin, their body morphology and composition, their activity level, and their resting energy expenditure. Large dogs can be divided into two groups, robust and athletic. These two groups share distinct common genetic origins, comparable morphologies and similar metabolic characteristics[1-3].

ROBUST DOGS

Generally have similar chest and waist measurements, giving the body a "cylindrical" appearance. They are characterised by higher body fat mass, lower energy requirements per unit of body weight and a propensity to be less active (compared with athletic dogs).

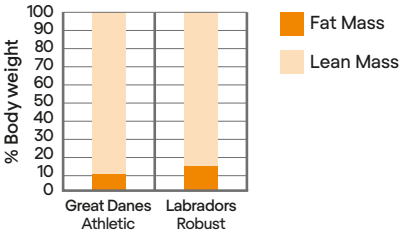
ATHLETIC DOGS

Have a morphology defined by a deep chest and thin abdomen giving the body a "cone-shaped" appearance. They are characterised by higher lean body mass, higher energy requirements per unit of body weight and have a propensity to be more active.

* Patent pending in Europe.

1. Parker *et al.* (2004) Genetic structure of the purebred domestic dog. *Science*: **304**: 1160-1164.
2. Kienzle *et al.* (1991) Maintenance Energy requirements of dogs: what is the correct value for the calculation of metabolic body weight in dogs. *J. Nutr.*; **121**: S39 - S40.
3. Speakman *et al.* (2003) Age-related changes in the metabolism and body composition of 3 breeds and their relationship to life expectancy. *Aging Cell*, **2**, 265–275.

BODY COMPOSITION OF ROBUST AND ATHLETIC LARGE DOGS

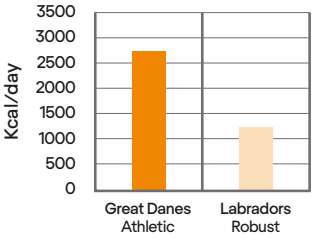


Large athletic dogs have less fat and more lean body mass than large breed robust dogs[3].

Conversely, large robust dogs have more fat and less lean body mass than athletic dogs[3].

**Note: Labradors have been classified as Robust dogs but individuals do vary. Some Labradors may fall under the category of Athletic, depending on genetics and morphotype.*

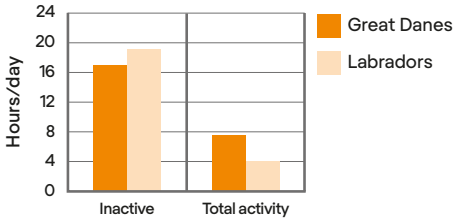
RESTING ENERGY NEEDS OF ROBUST AND ATHLETIC LARGE BREED DOGS



Large athletic dogs expend more energy at rest than large robust dogs[4].

Even when they are resting, athletic dogs may use up to 57% more kcal/day than robust dogs.

SPONTANEOUS ACTIVITY OF ROBUST AND ATHLETIC LARGE DOGS



Large athletic dogs show a greater level of spontaneous activity compared with large robust dogs[5].

Athletic dogs are active for up to 40% more time per day than robust dogs.

3. Speakman *et al.* (2003) Age-related changes in the metabolism and body composition of 3 breeds and their relationship to life expectancy. *Aging Cell*, **2**, 265–275.
4. Dobenecker *et al.* (2008) Energy Requirements of 2 different dog breeds for ideal growth from weaning to 6 months of age. Proc of the Nestlé PURINA Forum.
5. Perez-Camargo Bouthegourd G, *et al.* (2012) Patent n° 8,091,509 B2 Method for improving dog food.

LARGE ROBUST ADULT EVERYDAY NUTRITION

Supports everyday health maintenance

Complete pet food for large size adult dogs with a robust physique.

14 kg

- ✓ Maintenance diet for large robust adult dogs > 25 kg

No1 INGREDIENT CHICKEN

KEY BENEFITS

Superior nutrient absorption to fulfil your dog's needs
Specially formulated recipe to deliver higher digestibility and bioavailability of nutrients

Helps to keep your dog's coat beautifully shiny from root to tip

Formulated for large breed dogs with a robust physique to help support healthy joints and an active lifestyle
Omega-3 fatty acids and high protein levels help to support healthy joints

COMPOSITION & KEY NUTRIENTS

COMPOSITION
High quality chicken (including back and chest) (19%), rice (15%), dried poultry protein, wheat, corn, wheat middlings, digest, dried beet pulp, soya meal, wheat gluten, animal fats, corn protein meal, fish oil, minerals, dried egg.

KEY NUTRIENT VALUES*			
Moisture	8.0%	Phosphorus	0.99%
Protein	27.0%	Vitamin A	16354 IU/kg
Fat	12.0%	Vitamin D_3	957 IU/kg
- Omega-6 fatty acids	1.7%	Vitamin E	476 IU/kg
- Omega-3 fatty acids	0.3%	Vitamin C	70 mg/kg
Carbohydrate	43.0%	Taurine	1013 mg/kg
Crude fibre	2.5%	L-carnitine	200 mg/kg
Calcium	1.49%	Metabolisable energy (ME)[1]	368kcal/100g

* Typical analysis in the final product as fed. [1] Calculated following NRC 2006 equations.

FEEDING GUIDELINES

DAILY FEEDING QUANTITY (ADULT MAINTENANCE)		
Body weight (kg)	< 1 h activity (g/day)	1 to 3 h activity (g/day)
25	325	375
35	410	470
45	485	555
60	585	670
70	650	745
90	770	880