

The label of the package (I)

The publicity and sales

The publicity and sales techniques offer us with different manners to offer products to consumers.



Primary panel

The primary panel is the greatest publicity claim and it describes the identity of the product.



1

Name of product

Describes the food. It is related with the list of ingredients and its proportion in the food. It represents, together with the sales price, one of the principal selection criteria for owners. We can have various options according to the name. For example, with "meat", we find different proportions depending on how its indicated:

Meat	Rich in meat	Meat-based food	With meat	With meat flavor
(>95 % if we express it as dry material -DM-). In Europe, only sauce or gelatin are allowed.		(25-29 % if DM is considered).		Generally close to 1 %. In these cases, the only objective is that the animal recognize the characteristic flavor and smell.

2

Species identifier

Whether it is directed at dogs or cats and for a specific physiological state. Also, certain nutrition details are typically included such as the concepts of "complete" or "complementary" and "food with natural ingredients":



Its composition claims to cover all daily nutrition needs of the target species. Specifying for which physiological state the food is for is sometimes necessary.



It does not cover daily nutrition needs although it includes high proportions of certain ingredients. It can cover the daily food ration in combination with other foods.



Ingredients of animal or plant origin. They allow for treatments such as extraction, hydrolysis and fermentation. It cannot contain synthetic ingredients, food coloring, or flavor-enhancers. Synthetic nutrients (taurine) can be included as long as they are listed. A differentiation must be made from the "organic food" denomination. In this case, the ingredients included would be included within the concept of "ecological", that is, free of hormones, fertilizers, antibiotics, genetic modifications...

3

Prohibited

Certain terms for normal foods (not prescription) cannot be used when there is another food of similar characteristics on the market. For example: if foods A and B have similar compositions and are for adult dogs, we cannot say that A is healthier because it prevents ageing.



The information panel

The information panel provides qualitative and quantitative information about the different ingredients and nutrients.

It appears on the back or lateral sides of the food packaging.

Also, it offers information about the following:

- ✓ The nutrition sufficiency.
- ✓ Food recommendations or recommended daily quantities.
- ✓ Additives.
- ✓ Information from the manufacturer, importer and distributor of the food.
- ✓ Certifications from competent bodies.
- ✓ International product codes.
- ✓ Barcodes.
- ✓ Manufacturing date.

1

The recommended daily quantities

The recommended daily quantities represent the table that indicates the grams of food per day that should be offered to the pet, depending on their body condition, age and breed.

DOGS		CATS	
Weight	Daily food ration	Weight	Daily food ration
3-5 kg	50-70 g	4 kg	55 g
20-25 kg	180-210 g	5 kg	70 g
45-50 kg	310-355 g	6 kg	80 g
75-80 kg	440-460 g	7 kg	95 g

2

Dietary foods

Dietary foods are designed for the prevention and treatment of certain pathologies, based on research, and their administration can only be done under veterinary supervision. The legislation is similar to that for the rest of foods, but also includes the following:

- ✓ Its prescription or indication (weight loss, elimination of uroliths...).
- ✓ Under veterinary prescription.
- ✓ Specific nutrition characteristics (e.g. low in sodium).
- ✓ Target species.
- ✓ Time that this diet will be used (e.g. up to 12 months).

The table of the recommended daily quantities (food guide) does not have to be incorporated.



3

The nutrients are divided into 6 categories

The nutrients are grouped according to the approximate analysis of the foods.

Six categories have been established:



Moisture



Ash content



Crude protein



Crude fat or ether extract



Crude fiber
(in some cases as cellulose)



Nitrogen free extracts

The list of ingredients

The list of ingredients reflects the raw materials or ingredients that have been used. Its expression includes basic ingredients, that is, with their water content.

It is mandatory that they appear in decreasing order according to their proportion or weight in the food. The declaration of the list of ingredients is done as follows:

By groups (EU and Canada):

- ✓ Grains and by-products.
- ✓ Plant protein extracts.
- ✓ Plants and by-products.
- ✓ Meat and by-products: it is permitted to be derived from slaughter animals. When it is from another species (turkey, deer, or rabbit), this should be reflected in the

list of ingredients. Its quality is highly variable depending on the anatomical base; muscle is the most ideal, while bone flour and connective tissue present the worst quality.

- ✓ Milk and by-products.
- ✓ Eggs and by-products.
- ✓ Fish and by-products.
- ✓ Fats and oils: from animal or plant origin.
- ✓ Sugars.
- ✓ Yeasts.
- ✓ Minerals.

Individually (USA, EU and Canada as certified product): corn, poultry meat, soy flour, oats, poultry by-products, animal fat, calcium carbonate...



The label of the package (II)

1 The edition of the label

The edition of the label is regulated by the law and is a legal document. The legislation depends on the country and varies if it is for foreign trade, importation or for local sale.

These are some of the different organisms, both official or independent, that monitor the safety of pet foods:



2 The information according to countries

Depending on the country, there is an obligation to report about certain nutrients (e.g., protein, fat, moisture, ash, additives, vitamins and minerals), as well as of the minimum or maximum guaranteed content or of the exact content of a nutrient, that is obtained from the average from various laboratory determinations.

Expressions such as range of values are not permitted, for example:

Nutrient X: from 18 to 22 %.

The expression of the additives in the labels varies with the size of the package:



The following should be specified: "contains X additives authorized by the EU"



The additive must be specified: "contains food coloring X"

Nonetheless, some food manufacturers follow the norms established by the independent organisms (FEDIAF) where the minimum and maximum levels are recommended for the different ingredients.

On the other hand, any other nutrient that is added to the list of nutrients or is part of the commercial name must be highlighted as a "non-essential nutrient" and be included on the list.

In the EU, it is mandatory that additives be declared (1831/2002/EC). They are classified in four categories that are then divided into functional groups. We are especially interested in the categories of nutritional additives (vitamins and trace elements) and technological additives (food coloring, preservatives and antioxidants).



INFORMATION REQUIREMENTS ACCORDING TO EACH COUNTRY			
Nutrient (%)	USA	Canada	European Union ¹
Moisture	Maximum	Maximum	Exact
Crude protein	Minimum	Minimum	Exact
Crude fat	Minimum	Minimum	Exact
Crude fiber	Maximum	Maximum	Exact
Ash content	—	Maximum	Exact
Additives	—	—	Mandatory
Vitamin A (IU or mg/kg)	—	—	Exact
Vitamin E (IU or mg/kg)	Minimum	—	Exact
Vitamin D ₃ (IU or mg/kg)	—	—	Exact
Copper (mg/kg)	—	—	Exact
Antioxidants	—	—	Authorized
Food coloring	—	—	Authorized
Caloric content (kcal ME/kg)	Mandatory in light or low calorie foods	Not needed	Mandatory in certain dietary foods (weight loss, obesity and convalescence)

¹ The legislation is similar for livestock animals and for pets.

3

Of interest for clinicians

From a practical point of view, the list of ingredients, the guaranteed or typical analysis and the statement of nutrition adequacy are of interest to clinicians.

- ✓ The **guaranteed analysis, typical analysis, analytical constituents, average analysis or average composition**, provide information about the nutritional characteristics of the food (6 categories of nutrients).
- ✓ The **statement of nutritional adequacy** ensures that the food meets the **AAFCO regulations** (Association of American Feed Control Officials) and those of the **FEDIAF** (The Europe Pet Food Industry). This means that its efficiency as a basic food ration has been proven scientifically with the required protocols for the different categories established: adults (maintenance), gestation/lactation (reproduction) and growth. If a food covers the needs for reproduction and growth, it is valid for all physiological states. Text that indicates that



The foods have passed the AAFCO tests, are complete and balanced and that they are manufactured specifically for X (physiological state) should appear on the label.

Caution!



Ingredients

- ✓ We can see different presentations of an ingredient or different ingredients from the same category listed separately or in intermediate or final positions, but the sum of all of them is greater than some of the first majority ingredients. Example:



If we read the list, we can see that the sum of the grains has a greater proportion than that of chicken. In this case, the quality and quantity of the protein is not primarily from animal sources.



Base ingredients

- ✓ As the list is created according to the base ingredients, that is, with its content in water, some ingredients with a low moisture content occupy intermediate positions in the list, when they are actually majority ingredients if we evaluate them based on the dry material. Example:



Meat and its by-products have elevated moisture proportions (≈70%) and low protein concentration as a base food (15-20%), and they are the first to appear on the list. Soy flour, which has a low moisture (12%) and high concentration in protein (44%), will appear in later positions, however, if we compare it as dry material, the quantity of soy flour is much greater than that of meat. In this case, the same would occur as in the previous case regarding the protein.



Protein:ash ratio

- ✓ The protein:ash ratio is an important factor in the formulation of dry foods, especially in the case of cats. The choice of an ingredient low in protein and rich in ash (e.g., meat flour, meat and bone flour, lamb meat, fish flour) could present us with difficulties to cover the protein needs of a strict carnivore like cats, aside from the undesirable effects of the high proportion of magnesium and phosphorus.