



## ROYAL CANIN AIM TO PROVIDE HEALTH NUTRITION IN BOTH DRY AND WET TO EVERY DOG



### **Today, about 40% of dogs\* are fed with both Dry and Wet food**

Royal Canin's mission is to put pets' health first. Today, around 40% of dogs across all sizes (1) are fed a mix of kibble and wet food diet.

Consequently, if they are fed with non adapted food, numerous dogs can be exposed to nutrient dilution.

To ensure that every pet receives the right nutritional solutions according to their needs, Royal Canin introduce more and more wet formulas that match the nutritional answers of our kibbles.

In this document, we will explain why mixed feeding can even bring additional benefits to dogs.

# 01

## Different textures, different benefits

Both Royal Canin dry and wet foods are formulated to bring all the required nutrients a dog needs, taking into account the specific nutritional requirements of different life stages and health conditions.

### Some active properties are specific to dry food

Kibbles can be high-fiber. Kibble technology allows the formulation of higher fiber diets that can help dogs feel satiated and also manage specific digestive conditions.

Kibbles can positively influence oral health, thanks to a mechanical cleaning effect as the dog chews. This effect can be further reinforced in specific dental products by adapting the size and texture of the kibble and by incorporating active ingredients that limit tartar build up.

Some active ingredients, such as green tea polyphenols (known as an antioxidant) are better added to a kibble recipe, as they can in some cases negatively impact a wet food's palatability.

**Feeding with kibbles, aside from being nutritionally complete, permits particular nutrients and actions specific to dry foods.**

### Wet foods can help protect from urinary stones

The urinary tract is often a concern in dogs. Urinary stones account for 18% of all Lower Urinary Tract Disease (often called LUTD) in dogs (2).

Research shows that dietary moisture is important for the prevention of LUTD in small and medium sized dogs (3). Increased moisture intake dilutes the urine and increases the frequency of urination (3). This effectively flushes through the urinary tract, preventing crystals from forming (4).

**Increased moisture content in dog foods has been shown to support urinary tract health (5).**

### Wet foods reduce calories, helping maintain a healthy weight

An increasing percentage of dogs are overweight (6) and, as a result, suffer serious health consequences as well as a shortened lifespan.

Replacing a portion of kibbles with wet food reduces the calorie content of the meal, as wet food contains around a quarter of the calories per gram of dry food.

Subsequently, the lower energy density in the wet food helps to maintain the volume of the meal despite the reduction of energy intake.

It is interesting to note that kibble technology allows the formulation of higher fiber diets, while selected wet food allows fewer calories. We start to see how both play a role in mixed-feeding.

**Feeding wet food allows feeding fewer calories for the same weight of food, without jeopardising nutrient intake.**

# 02 Mix feeding can deliver additional benefits to dogs

Mixed feeding with kibbles and wet food can bring additional nutritional benefits, if done correctly. It is important to combine equal nutritional solutions in balanced proportions of kibbles and wet food.



## Mixing kibbles with wet foods can enhance palatability

Research indicates that dogs enjoy the novelty of new textures (7). Mixing dry and wet foods increases texture variety and mouthfeel, making the food palatable.

Secondly, dogs enjoy aroma. Dogs are known for their superior sense of smell: they have 13 to 60 times more olfactory cells than humans, and the area in their brain dedicated to odor analysis is 40 times larger. Wet foods enhanced smell can contribute to an increased palatability of the meal.







**Wet food texture, taste and smell can bring even more palatability to the meal.**

## The importance of quality

Mixed feeding can deliver additional benefits. However, it is critical that both kibbles and wet food are of high nutritional density and are designed to provide similar nutritional solutions. In the table, we see how nutrients can be diluted by mixing with a nutritionally inferior product.

**To avoid dilution, mix-feeding should be provided to dogs with dry and wet food having a similar nutritional profile.**



Example 1 : Mix feeding with Royal Canin products do not dilute nutrient intake Example of Dermacomfort, for a 5kg dog			
TYPE OF FOOD	Royal Canin® Dermacomfort MINI DRY only (79g)	Royal Canin® Dermacomfort WET only (319g)	Royal Canin® Dermacomfort Mix feeding (1 pouch, 85g wet + 69g dry)
EPA & DHA (g/day)	 0,32	 0,43	 0,34
Example 2 : Mix feeding with a non Royal Canin product dilutes nutrient intake Example of Dermacomfort, for a 5kg dog			
TYPE OF FOOD	Royal Canin® Dermacomfort MINI DRY only (79g)	Theoretical Product X with no EPA-DHA WET only	Mix feeding with Dermacomfort dry + Product x
EPA & DHA (g/day)	 0,32	 0	 0,28 ↘

Mix feeding with non appropriate dry and wet food can decrease the level of nutrients. In this example, the level of EPA &DHA which are key nutrients to support skin's health is degraded.

## The importance of right rationing

To take advantage of all the health benefits of wet and dry, it is important to follow the feeding guidelines, specific for each product. To ensure the balanced intake of energy and nutrients, Royal Canin is now more and more often providing mixed feeding instructions on packaging.

### ROYAL CANIN KIBBLE FOODS

All the nutrients a dog needs

+

Extra benefits :

- oral care
- addition of certain special nutrients



### ROYAL CANIN WET FOODS

All the nutrients a dog needs

+

Extra benefits :

- prevention of stones
- weight management
- palatability

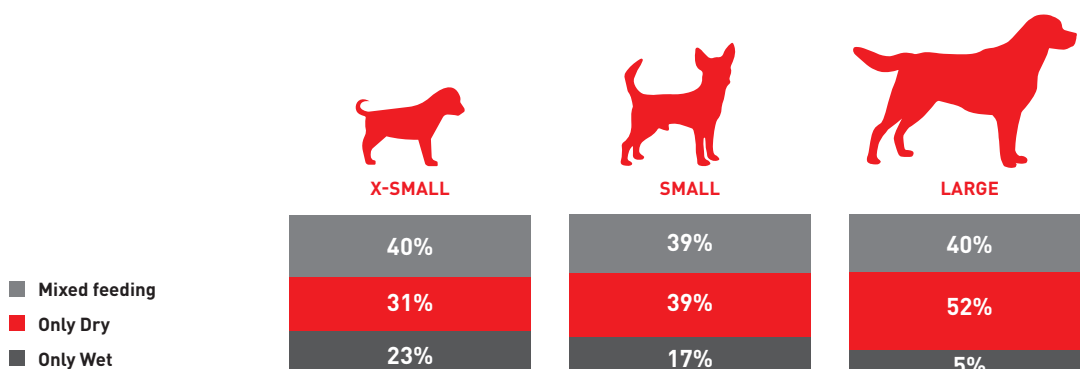
## 03 All dogs can benefit from mixed feeding

According to our observation, we believe that mixed feeding is beneficial to all dogs: every size, age, and sensitivity.

### Smaller dogs

Smaller dogs are more prone to urinary issues, and can therefore benefit from the addition of wet food to a dry diet. The addition of wet food can further help combat a trend in weight gain amongst small dogs. These dogs may also be fussier, and respond to the palatability of mixed foods.

**Small dogs currently on both wet and dry diets, or non-Royal Canin mixed foods, can benefit from Royal Canin mixed feeding.**



SOURCE: PROJECT EUROPEAN DOG FEEDING DIARIES, 2015 (Base: Europe: All Adult Toy Dogs (n=246), All Adult Small Dogs (n=316), All Large dogs (n=382))

## **Larger dogs**

Many people think only smaller dogs are exposed to mix feeding. However, studies show (see previous chart) that mixed feeding is in practice in 40% of dogs, across all sizes, reflecting the experience of many pet owners.

For larger dogs, mixed feeding brings all the benefits that it does to smaller dogs. A notable advantage is the enhanced palatability wet brings to meals in day to day life.

**Large dogs are equally exposed to mixed feeding and can also benefit from Royal Canin dry and wet food.**



## **Puppies**

Puppies fed with a range of different textures during weaning tend to have broad food preferences when they mature [8]. Flexibility with food will help to prevent dogs developing unwanted habits of fussiness later in life. It can also help dogs accept a new diet in different texture, for example a veterinary prescription diet in case of health issues, should the need occur in older age.

The soft texture of wet foods make them easier to eat, especially when transitioning from liquid milk to solid food. The nutrient balance of wet food also makes it a good option for puppies.

Research has proven the high digestibility of Royal Canin Puppy wet formulas: 4 wet products were tested (starter mousse, mini puppy, medium puppy and maxi puppy), involving 17 breeders and 235 dogs of 3 different sizes.

Reviews were overwhelmingly enthusiastic. For example, Mini Puppy received comments such as, "Very good palatability", "Perfect stools", and "Magic, it creates appetite" [9]. Starter mousse received a palatability scoring from breeders of 4,61/5 and a digestibility scoring of 2,64/5 (over ideal score which is 2,5). 100% of breeders were satisfied with this product and 100% would recommend it.



**Mixed feeding provides variety in texture to puppies. Wet foods' ease of eating, plus kibbles' higher energy concentration make mixed foods particularly adapted to growing puppies.**



### **Senior dogs**

Senescence causes a decline in sensorial capacities of aging dogs, in particular a reduced sense of smell (10).

Mixing kibbles with wet food with stronger smell can help to increase the palatability of the meal in senior dogs. This effect can be further intensified by slightly warming up the meal.

**Senior dogs with decreasing sense of smell can benefit from mix-feeding.**



### **Sensitivities**

Royal Canin has built a range of foods to help manage the early signs of sensitivities, the Canine Care Nutrition range.

In this product range, which offers nutritional solutions for ten different sensitivities, most formulas are available in dry and wet.

Thanks to this, the pet owner can feed his dog with a complementary action of kibbles and wet food, without jeopardizing the nutrient intake. In fact, when targeting sensitivities with precision nutrition, it is even more critical to avoid nutrient dilution.

**When offering highly precise nutrition to help manage sensitivities, it is even more critical to avoid nutrient dilution.**



## Royal Canin wet and dry offer

Royal Canin is delivering Health Nutrition through mixed dry and wet.



## A proof of a Royal Canin mixed feeding success

85% owner satisfaction was scored with mixed feeding using the Canine Care Nutrition diet Dermacomfort (11). In the study, 80 dogs (mini, medium and maxi) prone to skin irritation and itching were fed 1 pouch of wet food a day plus kibbles to reach their energy needs.

After 2 months, more than 70% of pet owners noticed a decrease in itching. 75% noticed an increase in coat brightness and 80% an increase in coat softness. 85% of pet owners were satisfied.

**High-quality results were demonstrated through Dermacomfort mixed feeding.**

### Example: Royal Canin's SPT mixed feeding solutions for every dog's needs

**e.g: Canine Care Nutrition range**



**e.g: Breed Health Nutrition range**



e.g: Size Health Nutrition range (Puppy, Adult, Mature, Ageing)



## RESEARCH SOURCES

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