



**MULTI FUNCTION**



For Veterinarian Use Only

ROYAL CANIN VETERINARY DIET®  
MULTIFUNCTION

As multiple disease diagnoses continue to increase – nearly 1 in every 2 pets suffers from multiple health conditions<sup>1</sup> – Royal Canin understands how important it is to have a single nutritional solution when there is more than one condition to manage.

Nutrition is a key management option for many common conditions, and Royal Canin has taken the dilemma out of which diet to prescribe and which condition to treat.

ROYAL CANIN VETERINARY DIET® Multifunction formulas keep you from having to choose between diets and which condition to manage.

A single solution to manage your patients’ multiple nutritional needs

- Optimal nutritional management with an appropriate solution for your patients
- No need to compromise nutritional therapy when there is more than one condition to manage
- Unique range of diets for the management of multiple nutritional needs in cats and dogs

A single solution that pet owners will find easy to support

- Easily fits into pet owner’s routine daily feeding
- Can manage both conditions their pet faces

Supports overall well-being for pets

- Highly palatable diets
- Nutritionally balanced therapeutic solution for pets with specific needs

Issues Seen in Veterinary Clinic	Frequency	Key Role of Nutrition
<b>Dermatology</b> (cutaneous adverse food reaction (CAFR))	A primary reason for consultation <sup>2,3</sup>	In managed AFR, switching the diet to manage other conditions may provoke cutaneous (or gastrointestinal) reactions <sup>4</sup>
<b>Urinary</b> (urolithiasis)	3rd most commonly affected body systems in cats <sup>3</sup>	RSS technology is used to formulate diets that can effectively dissolve pure struvite uroliths <sup>5</sup>
<b>Renal</b> (chronic kidney disease (CKD))	More than 10% of dogs and 30% of cats over 15 years of age have CKD <sup>6</sup>	Nutritional modification is a standard of care for cats and dogs with CKD <sup>7</sup>
<b>Excessive Bodyweight</b> (overweight or obese)	Approximately 1 in every 2 cats and dogs seen in veterinary clinics <sup>8</sup>	Proper diet can effectively reduce weight and improve quality of life <sup>9,10</sup>

THE ROYAL CANIN VETERINARY DIET®  
MULTIFUNCTION RANGE INCLUDES:

- Urinary + Satiety
- Urinary + Hydrolyzed Protein
- Urinary + Calm (feline only)
- Renal Support + Hydrolyzed Protein



URINARY

LOWER URINARY TRACT DISEASE IN CATS AND DOGS

Lower Urinary Tract Disease (LUTD) is a term used to describe a set of clinical signs associated with abnormal urination. Among the conditions responsible for LUTD in cats, feline idiopathic cystitis is by far the most common cause, while urolithiasis is the second leading cause.<sup>11</sup> In dogs, bacterial infection is the most common cause and urolithiasis is the second leading cause.<sup>12</sup>

CLINICAL SIGNS

- Frequent urination
- Urinating in inappropriate places
- Prolonged squatting or straining
- Blood in the urine
- Licking of affected region
- Dribbling of urine

Pet owners will often first notice an increased frequency of urination, leading dogs to urinate in the house and cats to urinate outside of the litter box. A thorough diagnostic work-up is required for appropriate management of lower urinary tract diseases. Among the therapies available, diet can play a significant role in both the treatment and prevention of multiple types of lower urinary tract disease.

RELATIVE SUPERSATURATION TECHNOLOGY

Urine supersaturation is the driving force for the formation of crystals within the urinary tract.<sup>13,14</sup> Relative Supersaturation (RSS) technology uses a complex calculation that measures the concentration of key substances that form struvite or calcium oxalate crystals in urine. The analysis shows the probability of crystal formation by taking into account many factors beyond the pH value.

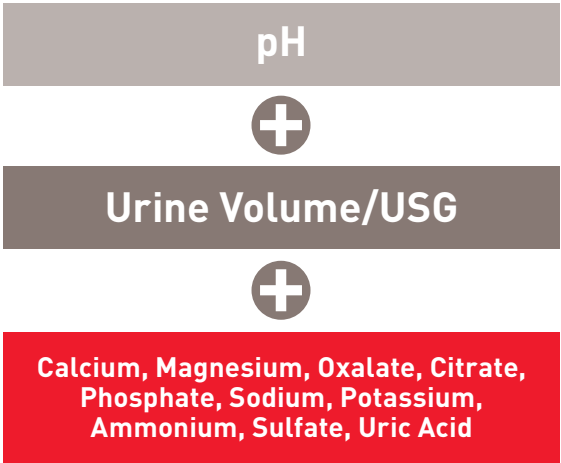
RSS VALUE

It is possible to influence the relative supersaturation of urine by feeding a special diet. At certain values of RSS, pure struvite stones can be dissolved.

- An RSS value in the undersaturation zone indicates that pure struvite crystals will dissolve and no new crystals will form. URINARY SO® diets achieve undersaturation for struvite and metastable for calcium oxalate.
- An RSS value in the metastable supersaturation zone indicates that the diet can help in the prevention of struvite and calcium oxalate crystal and stone formation. All ROYAL CANIN VETERINARY DIET® formulas carrying the S/O® Index icon achieve an RSS value within either the metastable supersaturation or undersaturation zone.

FEATURES SHARED BY ALL ROYAL CANIN VETERINARY DIET® MULTIFUNCTION URINARY FORMULAS

- Provides complete and balanced nutrition for maintenance in cats and dogs.
- Provides nutrition that aids in the management of pure struvite uroliths
- Developed with RSS technology to predict the crystallization potential of urine decreasing the risk of struvite and calcium oxalate crystal and stone formation
- Increases the urine volume which simultaneously reduces the saturation of urine with struvite and calcium oxalate precursors



## URINARY



## SATIETY

ROYAL CANIN VETERINARY DIET® Multifunction Urinary + Satiety features the benefits of our URINARY SO® diets outlined on the previous page, plus it is specially formulated to help overweight and obese pets lose weight.

### WHY IS OBESITY SO DIFFICULT TO TREAT?

Obesity management involves the pet owner and the pet in addition to the veterinarian. There are many factors that contribute to the difficulty in discussing and treating obesity in dogs and cats. Among them are:

#### The Pet Owner

- Unable to recognize or acknowledge obesity
- Unaware of the severity of the disease
- Perception of pet begging behavior as hunger

#### The Clinic

- Message is difficult to discuss with pet owners
- Obesity is not normally the priority during a consultation
- The process is time-consuming

#### The Pet

- Lack of exercise/activity
- Lack of stimulating environment
- Imbalance between energy intake and energy expenditure

### ALL MULTIFUNCTION URINARY + SATIETY DIETS FEATURE

- Satiatogenic Effect: Special blend of fibers that promotes satiety (the state of being fed and gratified to or beyond capacity) and helps reduce the spontaneous consumption of food
- High Protein: A high protein content helps maintain muscle mass during a weight loss program
- Bone & Joint Health: Nutrients help support healthy bones and joints placed under stress by excess body weight
- Essential Fatty Acids: Essential fatty acids (omega-3 and omega-6) and trace elements (copper and zinc) support a healthy skin and coat

## URINARY



## CALM

ROYAL CANIN VETERINARY DIET® Multifunction Urinary + Calm features the benefits of our URINARY SO® diets outlined on the previous page, as well as nutrients to help treat cats experiencing environmental stress.

### MODERN LIFESTYLES INVOLVE DISRUPTIONS THAT CAN BE A SOURCE OF STRESS

#### Examples of environmental changes:

- Introduction of a new animal into the household
- Birth of a baby
- Boarding or care by an unknown person
- Going on vacation
- Hospitalization
- Travel
- Moving or home renovation

### THESE IMBALANCES MAY AFFECT THE CAT'S PHYSIOLOGICAL ABILITY TO ADAPT

#### Clinical signs

- Changes in eating behavior
- Panting
- Dermatological consequences: compulsive licking in cats
- Shivering
- Excessive salivation
- Digestive consequences: vomiting, diarrhea
- Urinary consequences: feline idiopathic cystitis and urinary tract disease

### ALL MULTIFUNCTION URINARY + CALM DIETS FEATURE

- Support of skin function
- Support of digestive function



## URINARY



## HYDROLYZED PROTEIN

ROYAL CANIN VETERINARY DIET® Multifunction Urinary + Hydrolyzed Protein features the benefits of our URINARY SO® diets outlined previously, and is formulated to help treat pets with adverse food reactions.

### Clinical Signs of Adverse Food Reactions (AFR)

- Puritus
- Hair loss
- Redness of the skin
- Recurring bacterial and yeast infections
- Gastrointestinal upset

### HOW CAN A HYDROLYZED PROTEIN DIET HELP?

Protein sources contain antigens that have the potential to induce an allergic response. However, diets that include hydrolyzed proteins can offer a solution. The process of hydrolysis breaks down intact proteins into smaller polypeptides which are not recognized as foreign materials, and are less likely to cause reactions.

The addition of key nutrients to a diet designed to nutritionally manage AFR can support the skin as well as the overall health of the patient.

### ALL MULTIFUNCTION URINARY + HYDROLYZED PROTEIN DIETS FEATURE

#### Skin Barrier Complex

Optimal amount of B vitamins and amino acids help reduce transepidermal water losses and strengthen the barrier effect of the skin by increasing production of ceramides, important cutaneous lipids.<sup>15</sup>

#### EPA & DHA

Omega-3 fatty acids derived from fish oil help promote a healthy skin and coat

#### Digestive Support

Dogs and cats with AFR often have GI signs such as diarrhea

- Fructooligosaccharides (FOS) help promote the growth of beneficial bacteria
- Optimal fiber blend for good stool quality



## RENAL SUPPORT



## HYDROLYZED PROTEIN

ROYAL CANIN VETERINARY DIET® Multifunction Renal Support + Hydrolyzed Protein features the benefits of our Hydrolyzed Protein diets outlined above, and is formulated to help treat pets with chronic kidney disease.

### UNDERSTANDING CHRONIC KIDNEY DISEASE

Chronic Kidney Disease (CKD) is a common condition in pets, especially mature and senior cats and dogs. Because the kidneys naturally have a large capacity to filter blood, clinical signs may not become apparent until a considerable amount of kidney tissue is damaged. Typically the clinical signs of CKD don't appear until 75% of kidney function is lost. Regardless of its etiology, CKD is an irreversible disease and often progressive. The disease worsens as the kidneys continue to decline and results in further build-up of toxins in the blood that can lead to further kidney damage. By encouraging routine examinations, especially with senior pets, veterinarians can diagnose and begin to treat CKD at an earlier stage, thereby reducing clinical signs of disease and increasing lifespan.

### GOALS OF DIETARY MANAGEMENT

1. Limit phosphorus
  - Reduces risk of toxic level build-up of phosphorus levels in blood
  - Helps prevent development of secondary hyperparathyroidism
2. Maximize energy density
  - Helps provide adequate calories for pets who have reduced food intake
3. Improve and maintain body condition
  - Reduces risk of pets becoming emaciated
4. Balance protein level
  - Assists in limiting the production of uremic toxins
5. Support immune health and reduce inflammation

ROYAL CANIN VETERINARY DIET® Multifunction Renal Support + Hydrolyzed Protein therapeutic diets are formulated with highly digestible sources of protein that can help reduce the metabolic waste build-up in the blood while providing the necessary nutrients to avoid malnutrition.

### Omega-3 Fatty Acids

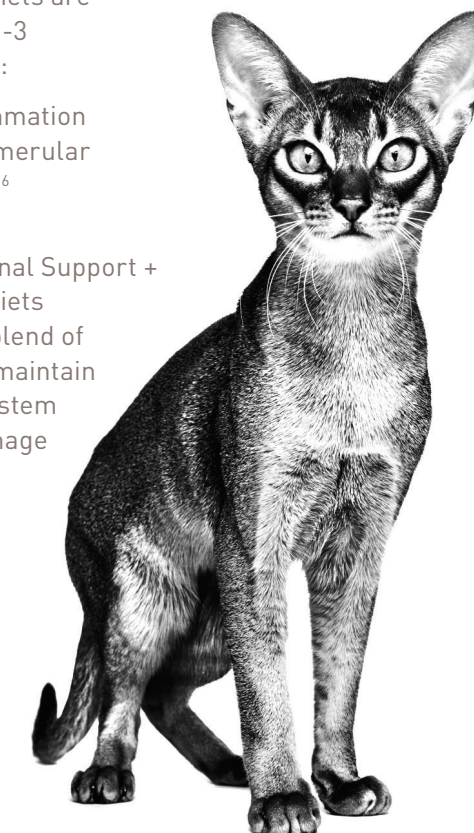
MULTIFUNCTION Renal Support + Hydrolyzed Protein diets are enriched with omega-3 fatty acids which can:

- Help reduce inflammation
- Help decrease glomerular capillary pressure<sup>16</sup>

### Antioxidants

MULTIFUNCTION Renal Support + Hydrolyzed Protein diets are enriched with a blend of antioxidants to help maintain a healthy immune system and reduce DNA damage in cells

- Vitamin E
- Vitamin C
- Taurine
- Lutein



## THE ROYAL CANIN VETERINARY DIET® COMMITMENT

- Nutritional philosophy based on the science of nutrients over ingredients
- Product philosophy of precise nutrition for size, lifestyle and therapeutic condition
- Founded by a veterinarian, ROYAL CANIN® continues to involve the veterinary community, employing a large network of veterinarians and specialists worldwide
- ROYAL CANIN® diets are manufactured exclusively in company-owned plants
- 100% satisfaction guaranteed for palatability and digestibility

## PRODUCT SELECTION

### CANINE

#### URINARY + HYDROLYZED PROTEIN

562235 7.7 lb.



562208 17.6 lb.



#### URINARY + SATIETY

561835 7.7 lb.



561808 17.6 lb.



#### RENAL SUPPORT + HYDROLYZED PROTEIN

562135 7.7 lb.



562108 17.6 lb.



### FELINE

#### URINARY + CALM

584012 12 oz.



584003 6.6 lb.



584008 17.6 lb.



44685 3 oz



#### URINARY + HYDROLYZED PROTEIN

583812 12 oz



583803 6.6 lb.



583808 17.6 lb.



#### URINARY + SATIETY

583612 12 oz



583603 6.6 lb.



583608 17.6 lb.



#### RENAL SUPPORT + HYDROLYZED PROTEIN

583712 12 oz



583703 6.6 lb.



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