**Recommended Diet for Canine**: (tick box)

- [ ] URINARY S/O MODERATE CALORIE
- [ ] URINARY S/O MODERATE CALORIE SMALL DOG

**Recommended Diet for Feline**: (tick box)

- [ ] URINARY S/O MODERATE CALORIE
- [ ] URINARY S/O MODERATE CALORIE SMALL DOG

**Recommended Daily intake**:

- [ ] grams
- [ ] pouches
- [ ] tins

If you have any further questions regarding urinary disease and its management at home, please find useful information online at www.royalcanin.co.uk or www.royalcanin.ie

If you have further questions please contact your veterinary practice.

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**Key Benefits**

*Royal Canin Urinary S/O diet is formulated to provide optimal nutritional support for your pet’s urinary system.*

- **Urinary S/O effectively dissolves struvite uroliths.**
- **Urinary S/O increases urine volume to reduce the risk of recurrence of both struvite and calcium oxalate stones.**
- **Undersaturated urine is an environment where crystals cannot proliferate.**
- **Low Relative Supersaturation diets produce urine unfavourable to the development of struvite and calcium oxalate crystals.**
- **The synergistic antioxidant complex (vitamin E, vitamin C, taurine, lutein) neutralises free radicals and helps maintain health.**
- **The high moisture content of Urinary S/O in pouch and alutray increases urine dilution. Wet diet should be the product of choice in cases of idiopathic cystitis.**

**Additional Benefits**

*Urinary S/O diets may also have additional benefits.*

- **Magnesium is a component of struvite crystals. Reduced dietary levels reduce levels in the urine.**
- **Sodium tripolyphosphates bind to salivary calcium making it less available for tartar formation.**
- **Reducing calorie content limits weight gain in overweight animals or those with a tendency for weight gain.**
URINARY S/O
Dietary management for pets with lower urinary tract disease

The recommended diet
Once diagnosed, lifelong dietary management for your pet may be required to help reduce the risk of stone formation and recurrence of lower urinary tract disease (LUTD).

Royal Canin Urinary S/O diet should be your pet’s sole source of food unless otherwise indicated by your veterinary surgeon. Royal Canin Urinary is designed for pets with special needs and we recommend veterinary consultation is sought before use.

Changing your pet’s diet
Changing your pet’s diet should always be carried out over several days. It is not uncommon for pets to refuse a new diet or to suffer from stomach upsets if the change is not gradual. On day 1, begin by adding a small amount of the new diet to your pet’s existing food. As each day passes, add more of the new diet to less of the original food, until eventually you are only feeding the new diet. This change should take around 5 days.

Royal Canin are leaders in palatability. So confident are we that your pet will enjoy their new food that we offer a no quibble, money-back guarantee. Simply return the food to your veterinary practice for a full refund.

A specific diet for your pet
Lower Urinary Tract Disease (LUTD) is the term for a number of urinary tract conditions of dogs and cats with similar clinical signs. These signs can include increased frequency of urination, pain on urination, blood in the urine and straining to pass urine. Dietary support is an important part of the management of cats and dogs with LUTD. Royal Canin Urinary S/O Diet has been specially formulated for the nutritional management of cats and dogs with LUTD. It is available in dry, canned, pouch and alutray formats.

Key features
The key features of the Royal Canin Urinary S/O diet are:
- Provides a moderately acidic urine
- High moisture content of the wet diet increases urine volume
- Increased sodium chloride content of the dry diet encourages drinking to increase urine volume
- Restricted magnesium content
- Controlled levels of calcium and oxalate
- Moderately restricted phosphorus and protein contents

Royal Canin Urinary S/O diet maintains urine pH within the optimum range to dissolve struvite stones and reduce the risk of recurrence of struvite stones. It also maintains a low urine concentration to reduce the risk of formation of or recurrence of calcium oxalate stones and helps reduce the frequency and severity of clinical signs associated with feline idiopathic cystitis (cystitis of unknown origin).

Antioxidants
Royal Canin Urinary S/O diet is enriched in antioxidants (vitamin E, taurine and lutein) to help maintain health and vitality. Antioxidant is a general term for different types of nutrients such as vitamins, minerals and other components, naturally present in many foods. Antioxidants neutralise the damaging free radicals produced at high levels in the ill animal.

Answers to your questions

What is struvite?
Struvite is formed from a combination of magnesium, ammonium and phosphate and is the most common mineral found in urinary stones (uroliths) of cats and dogs. Royal Canin Urinary S/O diet ensures that the pet’s urine is moderately acidic and so dissolves any struvite crystals or stones, by this method it also reduces risk of new ones from forming.

Dogs with struvite stones often also have a urinary tract infection for which your veterinary surgeon will prescribe antibiotics.

What is calcium oxalate?
Calcium oxalate is the second most common crystal type making up dog and cat urinary stones. Royal Canin Urinary S/O diet is designed to maintain calcium oxalate saturation to levels which reduce the risk of crystals forming in the urine. The diet is also designed to reduce the risk of recurrence of calcium oxalate stones following removal.

My cat has idiopathic cystitis. What is this?
In most cases of Feline LUTD (over 64%) there is no apparent cause for the various clinical signs seen. This is classified as “idiopathic” cystitis. Royal Canin Feline Urinary S/O in pouch and alutray format help dilute your cat’s urine and help alleviate clinical signs and discomfort. This also helps reduce the frequency with which your cat has bouts of cystitis.

What is RSS and what is RSS used for?
Relative Supersaturation (RSS) is a measure of the crystal (and stone) forming potential of the urine. Each diet can be given an RSS rating according to the urine sample which is produced after it is eaten.

How do you measure RSS?
The concentrations of 10 different minerals plus urine pH and volume are measured and then a computer programme calculates the urine samples RSS value. An RSS value of less than 1 for struvite and less than 5 for calcium oxalate indicates that the urine is undersaturated for these crystals, which is key to the successful management of urinary stone formation. Higher RSS values indicate a greater chance for growth of crystals and stones in the urine.

Why not just measure pH of the urine?
Urinary pH is just one of the many key factors in controlling struvite stone formation. The concentration of minerals in urine (which includes consideration of urine volume) is also important. RSS measures these multiple factors.

Can a diet dissolve calcium oxalate stones?
No: the best treatment for your pet may be an operation to remove calcium oxalate stones. This can then be followed by dietary management of your pet to reduce the risk of new stones forming.

Why must the urine volume be increased?
To dilute minerals in the bladder so they are less likely to form into crystals and then stones. It also helps to increase the frequency of urination, allowing less opportunity for the urine to “pool” within the bladder and less time for crystals and stones to form.

What happens when a cat’s urinary tract is blocked?
Some pets (particularly male cats) develop urethral plugs which block the urethra (the tube transporting urine from the bladder). Urethral plugs are caused by accumulation of material in the urinary tract, usually a combination of waste cells from the bladder plus struvite. Following surgery to remove the plug, Royal Canin Feline Urinary S/O diet may be used to reduce the risk of any further struvite forming.