



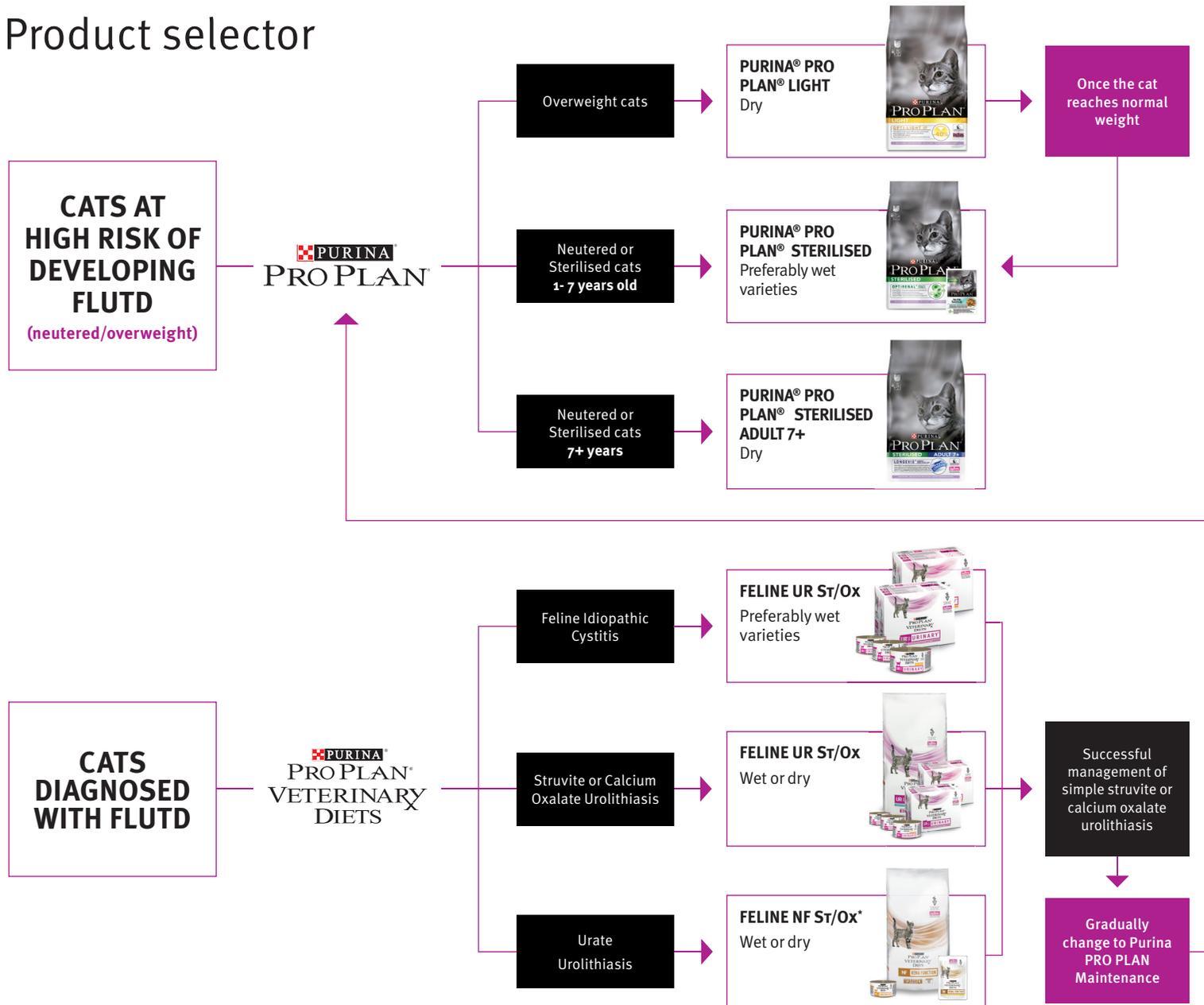
 PURINA®  
PRO PLAN®

# MANAGING AND REDUCING THE RISK OF LOWER TRACT URINARY DISEASES (FLUTD)

Effective nutritional solutions PURINA® PRO PLAN®

# FLUTD

## Product selector



### St/Ox Benefit: The reassurance of urinary health support for cats with other primary clinical conditions

Because stress (including the stress of illness) increases the risk of cats developing FLUTD, PURINA® PRO PLAN® has ensured that our range of Veterinary Diets for many clinical conditions in cats are formulated to help reduce the risk of struvite and oxalate uroliths – so you can be confident that cats' urinary health is being supported while their primary condition is being managed.

#### Diets with the St/Ox benefit are:

	<b>DH St/Ox</b> For cats with dental conditions		<b>DM St/Ox</b> For cats with diabetes mellitus
	<b>EN St/Ox</b> For cats with gastrointestinal disorder		<b>HA St/Ox</b> Hydrolysed diet for diagnosis & management of food allergy in cat
	<b>HP St/Ox</b> For cats with liver disease		<b>NF St/Ox*</b> For cats with chronic renal failure & urate urolithiasis
	<b>OM St/Ox</b> For overweight & obese cats		<b>UR St/Ox</b> For cats with FLUTD

# FLUTD: HELPING REDUCE THE RISK IN PREDISPOSED CATS

Effective nutritional solutions  
from PURINA® PRO PLAN®

APPROVED  
FORMULAS

HIGH QUALITY  
INGREDIENTS

HIGHLY  
PALATABLE



# ADULT – LIGHT (Dry Diet)



## A complete diet for overweight adult cats

### USAGES

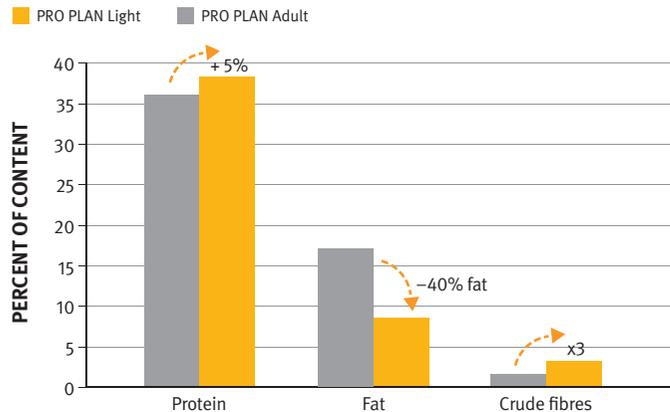
- Less active or sedentary cats from 1 to 7 years
- Overweight cats

### PROVEN RESULTS

- Overweight cats are prone to FLUTD
- Getting them to optimal weight reduces the risk of them developing FLUTD



PRO PLAN® ALL SIZES ADULT LIGHT / STERILISED with OPTIWEIGHT™ is proven to specifically target fat mass loss

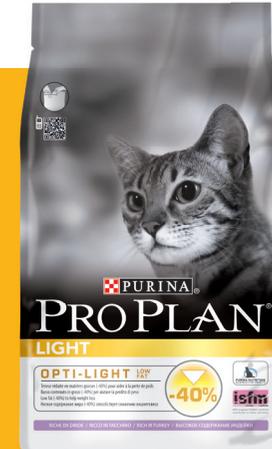


### KEY BENEFITS:

- HIGHLY PALATABLE RECIPE** – Made with cuts of turkey and a very palatable kibble coating to promote client compliance.
- PROTEIN DIGESTIBILITY ABOVE 85%** – Together with a high protein level, helps promote lean body mass maintenance during weight loss.
- HELPS MAINTAIN HAIR HEALTH AND BEAUTY DURING WEIGHT LOSS** – Contains vitamin A, essential fatty acids and zinc for silky and glossy coat.



**WITH OPTILIGHT®** – helps weight loss due to fat reduced by -40% versus adult formula together with high protein levels and added fibres.



400 g, 1.5 kg, 3 kg, and 10 kg

### DAILY FEEDING QUANTITIES (Adult Maintenance)

Body weight (kg)	Weight loss	Weight maintenance
4 – 6	55 – 85	70 – 105
6 – 8	85 – 110	105 – 140
8 – 10	110 – 140	140 – 175

### LIGHT (DRY DIET) WITH OPTILIGHT® ADULT

Key nutrient values	Dry
Moisture	6%
Protein	38%
Fat	9.0%
Carbohydrate	38%
Crude fibre	3.0%
Calcium	1.1%
Phosphorus	1.0%
Vitamin A	22 175 IU/kg
Vitamin D <sub>3</sub>	1110 IU/kg
Vitamin E	647 mg/kg
Vitamin C	70 mg/kg
Zinc	185 mg/kg
Taurine	1693 mg/kg
Metabolisable energy (ME)*	3.4 kcal/g

\* Calculated using modified Atwater's factors.

### INGREDIENTS

Turkey (16%), maize gluten meal, rice, soya meal, wheat gluten meal, maize, dehydrated poultry protein, wheat, beet pulp, minerals, fish oil, animal fat, digest, yeast, dried egg.

# ADULT – STERILISED (Dry Diet)



## A complete dry diet for neutered or sterilised adult cats

### USAGES

- Neutered or sterilised cats from 1 to 7 years

### PROVEN RESULTS

#### Neutered cats are at higher risk of weight gain and FLUTD

- Neutering interferes with control of normal food intake, resulting in food overconsumption and weight gain
- Neutering reduces daily energy requirements by 25-30% by decreasing basal metabolic rate and spontaneous activity
- Together with being prone to weight gain, neutered cats are at risk to develop FLUTD



### KEY BENEFITS:



**HELPS LIMIT THE RISK OF FELINE LOWER URINARY TRACT DISEASE (FLUTD)** – Contains balanced minerals and is formulated for controlled urinary pH.



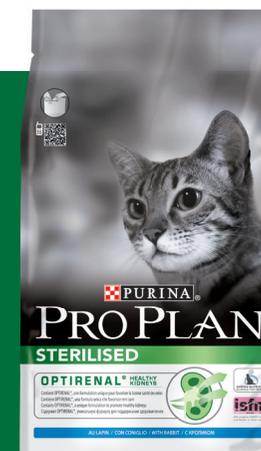
**HELPS MAINTAIN AN IDEAL BODY WEIGHT** – Contains a high protein level (41%), added fibre and low carbohydrate level. Feeding guidelines adapted to the lower energy needs of neutered cats.



**HELPS PROTECT TEETH FROM PLAQUE AND TARTAR BUILD-UP** – Crunchy kibbles reducing plaque and tartar deposition by mechanical action.



**OPTIRENAL®** – is a special combination of nutrients including antioxidants, arginine and omega-3 fatty acids.



400 g, 1.5 kg, 3 kg, and 10 kg

### DAILY FEEDING QUANTITIES (Adult Maintenance)

Body weight (kg)	Daily feeding quantity (g)
2 – 4	30 – 60
4 – 6	60 – 90
6 – 8	90 – 120

### INGREDIENTS

**Rich in turkey:** Turkey (20%), dehydrated poultry protein, maize gluten meal, rice, maize, wheat fibre, wheat gluten meal, dried egg, fish oil, animal fat, minerals, digest, yeast.

**Rich in salmon:** Salmon (20%), dehydrated poultry protein, maize gluten meal, rice, maize, wheat fibre, wheat gluten meal, dried egg, minerals, animal fat, digest, yeast.

**With rabbit:** Chicken, maize gluten meal, rice, dehydrated poultry protein, wheat gluten meal, maize, wheat fibre, rabbit (4%), animal fat, dried egg, minerals, fish oil, digest, yeast.

### STERILISED WITH OPTIRENAL ALL SIZE ADULT

Key nutrient values*	Dry
Moisture	6%
Protein	41%
Fat	12.0%
Carbohydrate	29.5%
Crude fibre	4.5%
Vitamin A	21822 IU/kg
Vitamin D <sub>3</sub>	1450 IU/kg
Vitamin E	775 IU/kg
Vitamin C	80 mg/kg
Taurine	2045 mg/kg
Metabolisable energy (ME) **	3.5 kcal/g

\* Average of the three varieties. \*\* Calculated using modified Atwater's factors.

# ADULT – STERILISED NUTRISAVOUR (Wet Diet)



## A complete wet diet for neutered or sterilised adult cats

### USAGES

- Neutered or sterilised cats from 1 to 7 years

### PROVEN RESULTS

#### Overweight and neutered cats are at increased risk of FLUTD

PRO PLAN Sterilised Nutrisavour helps increase a cat's water intake and therefore promotes diuresis – thereby helping maintain lower urinary tract health.

#### Sterilised cats are at increased risk of weight gain

PRO PLAN Sterilised Nutrisavour helps maintain lean muscle mass due to increased protein and lower fat levels\*.

\*vs the other adult Nutrisavour products



### KEY BENEFITS:



**HELPS MAINTAIN URINARY HEALTH IN NEUTERED CATS** – Fed with a wet diet, a cat increases water intake and diuresis thanks to higher food moisture.



**HELPS MAINTAIN HEALTHY BODY WEIGHT** – Contains higher protein and lower fat levels\*\*, which helps maintain lean body mass.



**HELPS MAINTAIN STRONG NATURAL DEFENCES THANKS TO ANTIOXIDANTS, SUCH AS VITAMIN E** – Contains vitamin E, zinc and selenium.

**TENDER PIECES WITH MEATY PIECES IN GRAVY** – Soft pieces cut into fillets, made with a proprietary technology.



**OPTIRENAL®** – is a special combination of nutrients including antioxidants, arginine and omega-3 fatty acids.

\*\*vs the other adult Nutrisavour products



85 g pouch

### DAILY FEEDING QUANTITIES (Adult Maintenance)

Body weight (kg)	Pouches/day <sup>1</sup>
2	2
4	3
6	4

<sup>1</sup>to be fed in at least two separate meals

### INGREDIENTS

**With beef:** Meat and animal derivatives (of which beef 4%), vegetable protein extracts, fish and fish derivatives, derivatives of vegetable origin, minerals, oils and fats, various sugars.

**With chicken:** Meat and animal derivatives (of which chicken 4%), vegetable protein extracts, fish and fish derivatives, derivatives of vegetable origin, minerals, oils and fats, various sugars.

### STERILISED WITH OPTIRENAL ALL SIZE ADULT

Key nutrient values <sup>5</sup>	Wet
Moisture	78%
Protein	13%
Fat	3.3%
- Omega-6 fatty acids	0.9%
- Omega-3 fatty acids	0.1%
Carbohydrate	3%
Crude fibre	0.5%
Calcium	0.3%
Phosphorus	0.3%
Zinc	85 mg/kg
Selenium	0.1 mg/kg
Vitamin A	13050 IU/kg
Vitamin D	529 IU/kg
Vitamin E	195 IU/kg
Metabolisable energy (ME) <sup>1</sup>	0.85 kcal/g

<sup>5</sup> Average of the three varieties. <sup>1</sup> Calculated using modified Atwater's factors.

# ADULT – STERILISED 7+ (Dry Diet)



## A complete diet for all mature sterilized adult cats

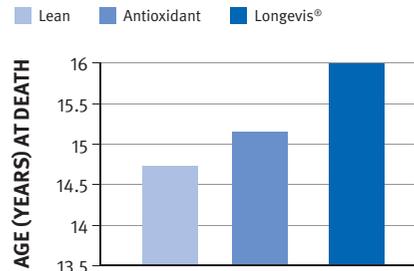
### USAGES

- From 7 years old and above

### PROVEN RESULTS

#### LONGEVIS® is proven to extend the healthy life of senior cats

Cats fed a diet containing the LONGEVIS® combination lived significantly longer than cats fed either a standard nutritionally complete diet or a standard diet only supplemented with antioxidants and they showed a significant higher average age at death compared to the cats of the two other groups (one year on average<sup>1,2</sup>).



Nestlé PURINA® has proven that cats aged seven years and above, when fed exclusively on a diet containing LONGEVIS® lived significantly longer whilst enjoying good health.

When mature cats fed nutritionally complete and balanced diets were compared, cats fed on the diet rich in LONGEVIS® not only extended their life, but also exhibited stronger indices of health such as:

- Improved red blood cell levels and haematocrit
- Enhanced vitamin E absorption and circulating levels, which helps maintain the immune system function
- Reduced thinning of the skin generally seen in older cats
- Maintenance of a healthy body weight and body protein stores
- Maintenance of a healthier gut flora balance

1. Cupp C, Jean-Philippe C, Kerr W *et al.* Effect of Nutritional Interventions on Longevity in Senior Cats. 2006. *Intern J Appl Res Vet Med*, 4(1), 34-50.  
 2. Cupp C, Kerr W, Jean-Philippe C *et al.* The Role of Nutritional Interventions in the Longevity and Maintenance of Long-term Health in Ageing Cats. 2008. *Intern J Appl Res Vet Med*, 6(2), 69-81.

### KEY BENEFITS:



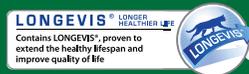
**HELPS SUPPORT KEY VITAL FUNCTIONS (IMMUNE, RENAL, DIGESTION)–** Formulated with LONGEVIS proprietary combination of prebiotics, antioxidants (Vit E and beta-carotene), essential omega 3 and 6 fatty acids.



**HELPS MAINTAINS URINARY HEALTH IN NEUTERED CATS THAT ARE AT INCREASED RISK OF FLUTD –** Contains balanced minerals and it is formulated for controlled urinary pH.



**HELPS MAINTAIN AN IDEAL BODY WEIGHT –** Formulated with moderate fat levels, high protein and added L-carnitine.



**LONGEVIS®** – a Nestlé PURINA® proprietary combination of ingredients, proven to extend lifespan of 7+ cats by one year on average.



400g e, 1.5k eg, 3kg e

### DAILY FEEDING QUANTITIES (Adult Maintenance)

Body weight (kg)	Age 7-11 years old	Age >12 years old
2 – 4	30 - 55 g	45-65 g
4 – 6	55-85 g	65-100 g
6 – 8	85-115 g	100-135 g

### INGREDIENTS

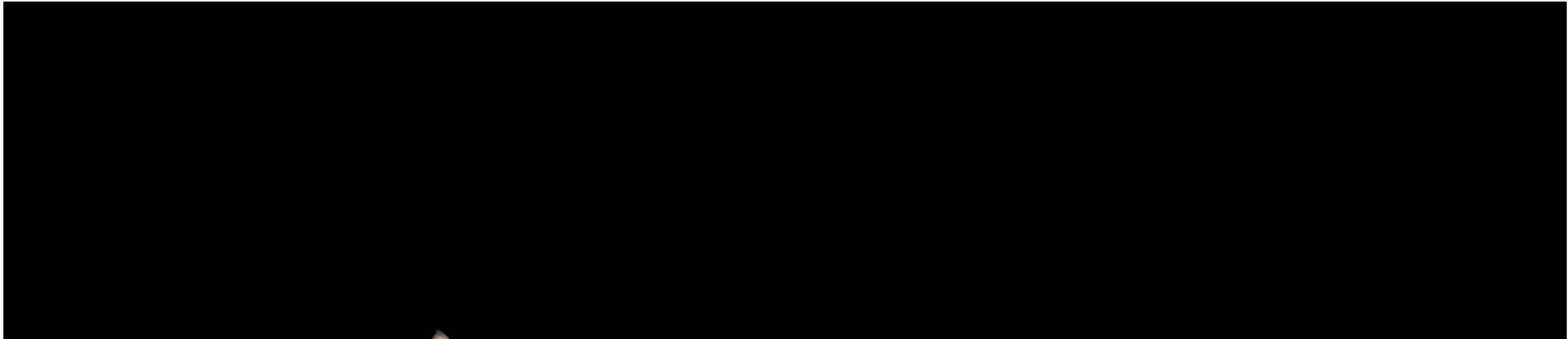
Turkey (14%), dehydrated poultry protein, rice, maize gluten meal, wheat gluten meal, wheat, wheat fibre, soya meal, corn starch, dried egg, animal fat, dried chicory root (2%)\*, soybean oil, minerals, fish oil, digest, yeast.

\* Natural prebiotic.

### STERILISED 7+ WITH LONGEVIS® ADULT

Key nutrient values	Dry
Moisture	6%
Protein	40%
Fat	13%
- Omega-6 fatty acids	3.0%
- Omega-3 fatty acids	0.5%
Carbohydrate	32%
Crude Fibre	3%
Calcium	0.9%
Phosphorus	0.8%
Vitamin A	22810 IU/kg
β-carotene	180 mg/kg
Vitamin D	1195 IU/kg
Taurine	2713 mg/kg
Vitamin E	1270 IU/kg
L-Carnitine	200 mg/kg
Metabolisable energy (ME)**	3,6 kcal/g

\*\* Calculated using modified Atwater's factors.



# FLUTD: NUTRITIONAL MANAGEMENT OF CLINICAL CASES

Advanced nutritional solutions from  
PURINA® PRO PLAN® VETERINARY DIETS

CLINICALLY  
PROVEN

EASY TO STORE  
AND RECOMMEND

HIGHLY  
PALATABLE



# Feline UR St/Ox Urinary



## A clinical diet for the management of Feline Lower Urinary Tract Diseases (FLUTD)

### INDICATIONS

- Dissolution of struvite uroliths
- Reduction of struvite urolith recurrence
- Reduction of oxalate urolith recurrence
- Idiopathic cystitis

### CONTRAINDICATIONS

- Not suitable for growth and reproduction
- Chronic renal failure
- Other conditions associated with diuresis
- Fluid retention such as ascites and oedema

### KEY BENEFITS:



**PROMOTES THE PRODUCTION OF URINE UNDER-SATURATED** – for struvite and metastable for calcium oxalate (St/Ox urinary security).

**PRODUCES A URINE COMPOSITION** – to promote dissolution of struvite uroliths..

**MODERATE LEVELS OF FAT AND CALORIES** – to help maintain ideal body weight (obesity being a risk factor for FLUTD).



195 g 350 g, 1.5 kg and 5 kg 85 g

### PROVEN RESULTS

- Feline UR St/Ox is formulated to help increase urine volume and help reduce urine specific gravity to promote a lower concentration of substances that may irritate the urothelium
- Feline UR St/Ox promotes a urine undersaturated for struvite and in the low metastable range for calcium oxalate
- Feline UR St/Ox is proven to dissolve urinary struvite stones<sup>3</sup>

### DAILY FEEDING QUANTITIES (Adult Maintenance)

Body weight (kg)	Dry (g/day)	Wet (can/day)	Wet+Dry combined	
			Wet (can/day)	Dry (g/day)
2	35	¾	1/3	20
4	70	1½	1	20
6	100	2	1	50
8	130	2 2/3	1	65

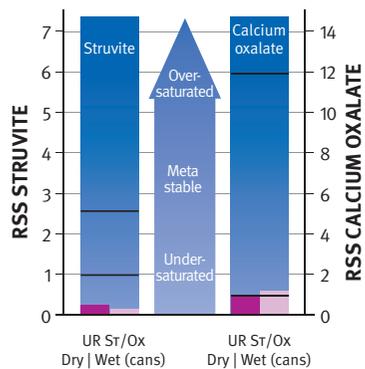
Recommended length of time for use: For dissolution of struvite stones, an initial feeding period of 5-12 weeks is recommended. For long-term use, an initial feeding period of up to six months is recommended, but the cat should be re-evaluated regularly as indicated by the underlying condition.

### FELINE UR St/Ox URINARY ADULT

Key nutrient values	Dry	Wet
Moisture	6.5%	80%
Protein	35%	10%
Fat	12%	5.3%
Carbohydrate	37%	2.5%
Crude fibre	1.5%	0.5%
Calcium	0.8%	0.14%
Phosphorus	0.8%	0.14%
Sodium	1.2%	0.17%
Potassium	0.7%	0.3%
Magnesium	0.08%	0.02%
Chloride	2.4%	0.3%
Sulphur	0.3%	0.21%
Taurine	1500 mg/kg	1480 mg/kg
Vitamin E	550 mg/kg	143 mg/kg
Metabolisable energy (ME) <sup>†</sup>	3.5 kcal/g	0.9 kcal/g
RSS struvite	<1	<1
RSS oxalate	<12	<12
Urinary pH	6 – 6.3	6 – 6.3

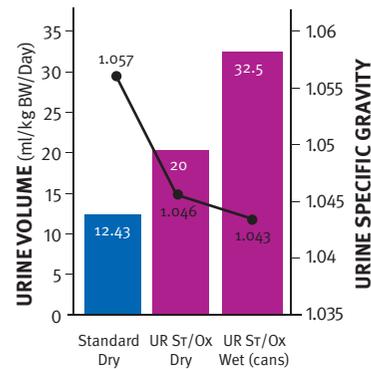
<sup>†</sup> Calculated using modified Atwater's factors.

### RSS for struvite and oxalate in cats fed Feline UR St/Ox



<sup>3</sup> 2016 internal report NPP EMENA

### Urine SG and volume in cats fed Feline UR St/Ox



### INGREDIENTS

**Dry:** Chicken variety : Maize gluten meal, dehydrated poultry protein (15%, of which 50% chicken), rice, wheat flour, maize, animal fat, minerals, dried egg, dried beet pulp, digest, fish oil.  
**Ocean fish variety:** Maize gluten meal, rice, wheat flour, dehydrated poultry protein, maize, animal fat, dehydrated salmon protein (4%), minerals, dried egg, dried beet pulp, digest, fish oil.

**Wet:** Pork kidney, liver and lung, turkey, chicken\*, poultry heart and liver, salmon\*\*, rice flour, cellulose, minerals, various sugars.

\* Chicken variety only \*\*Salmon variety only

# Feline NF St/Ox Renal Function



## A clinical diet to help manage chronic renal failure in cats

### INDICATIONS

- Chronic renal failure (CRF)
- Hepatic disease with encephalopathy
- Reduction of recurrence of urate and cystine uroliths

### CONTRAINDICATIONS

- Not suitable for growth and reproduction

### KEY BENEFITS:

- LOW PHOSPHORUS**  
 **DIETARY PHOSPHATE RESTRICTION** to slow the progression of CRF and minimise the risk of secondary hyperparathyroidism
- OPTI PROTEIN**  
 **RESTRICTED BUT HIGH QUALITY PROTEINS** to help minimise the formation of uraemic toxins – clinically beneficial in CRF
- GREAT TASTE**  
 **HIGH PALATABILITY** to help achieve patient compliance, essential for long-term dietary management of CRF



### PROVEN RESULTS

Urate uroliths are the 3rd most common urolith in cats (6- 9% of feline uroliths submitted for analysis<sup>4,5</sup>), are almost exclusively found in the bladder and can be related to portovascular anomalies. The recommended nutritional management to help prevent recurrence of urate uroliths in cats is with a:

- Non acidifying diet containing potassium citrate (Prevention of recurrence of urates is >90% using diet containing potassium citrate<sup>6</sup>)
  - Feline NF contains added potassium citrate
- Diet producing target urine pH >6.6
  - Feline NF produces a urine pH of 7.1 ± 0.4
- Diet containing limited amounts of high quality protein/purines
  - Feline NF is a restricted protein diet

### DAILY FEEDING QUANTITIES (Adult Maintenance)

Body weight (kg)	Dry only (g/day)	Wet only		Can+dry combined		Pouch+dry combined	
		(can/day)	(pouch/day)	Can/day	Dry g/day	Pouch/day	g/day
2	33	1 ½	1 ¾	1/3	10	1	15
4	65	1	3 ½	1/2	30	3	10
6	100	1 ½	5 ¼	1	30	4	25
8	135	2	7 ¼	1	65	6	20

A gradual transition to a new diet may be especially helpful in cats with CRF. Cats with CRF that remain inappetent or anorexic cats should be assessed for nausea and uraemic gastritis. Warming the product to room temperature can enhance palatability for cats with a fussy appetite. Where adequate fluid intake is a concern, the PURINA® PRO PLAN® VETERINARY DIETS NF St/Ox Renal Function™ wet formula is strongly recommended. Cats with chronic renal failure should be fed Feline NF St/Ox Renal Function for life.

### INGREDIENTS

**Dry:** Maize meal, rice flour, soya meal, wheat flour, maize gluten meal, animal fat, wheat gluten meal, digest, dried egg, pea fibre, dehydrated sugar beet pulp, dehydrated poultry protein, fish oil, mineral, yeast.

**Wet:** Cans: Pork liver, turkey, poultry heart and liver, animal fat, rice flour, minerals, sunflower oil, fish oil, various sugars.  
Pouches: Pork kidney, pork trachea, pork liver, chicken, salmon, flour rice, dried yeast, cellulose.

### FELINE NF St/Ox RENAL FUNCTION ADULT

Key nutrient values	Dry	Wet (cans)	Wet (pouches)*
Moisture	6.5%	76.5%	82%
Protein	26%	7.3%	7.3%
Fat	12%	11.2%	5%
- Essential fatty acids	1.28%	2.61%	0.9%
- Omega-6 fatty acids	1.28%	2.6%	0.8%
- Omega 3 fatty acids	0.37%	0.3%	0.25%
Carbohydrates	48%	2.7%	3.6%
Crude fibre	3%	0.3%	0.6%
Calcium	0.6%	0.3%	0.18%
Phosphorus	0.5%	0.10%	0.11%
Potassium	0.8%	0.43%	0.29%
Sodium	0.2%	0.1%	0.11%
Taurine	1500 mg/kg	970 mg/kg	850 mg/kg
Vitamin E	550 mg/kg	143 mg/kg	160 mg/kg
Metabolisable energy (ME)**	3.6 kcal/g	1.29 kcal/g	0.8 kcal/g

\*Average of the chicken and salmon varieties \*\*Calculated using modified Atwater's factors.

4. Cannon AB, et al. Evaluation of Trends in Urolith Composition in Cats: 5,230 cases (1985-2004). *J Am Vet Med Assoc.* 2007; **231**:570-6.

5. Houston DM, Moore AEP, Favrin MG et al. Feline Urethral Plugs and Bladder Uroliths: A Review of 5484 Submissions (1998- 2003). *Can Vet J.* 2003; **44**: 974- 977;

6. Bartjes J, Kirk C. Nutrition and Urolithiasis. *Proc 25th Annu ACVIM Forum* 2007: 13- 15



**Committed to providing you with simple and effective nutritional solutions for all your FLUTD cases.**

*For more information please contact your PURINA® representative.*

