• Formulated for the dietary management of adult cats with FLUTD

• Reduces the risk of both struvite and calcium oxalate stones

• Promotes increased urine volume

• Contains moderate fat and calories
Feline Formulas

It is estimated that approximately 3% of all cats presented to private veterinary practices show signs of Feline Lower Urinary Tract Diseases (FLUTD). FLUTD is a group of diseases with many causes that can affect the ureters, urinary bladder, or the urethra. They are often grouped because of the similarity in clinical signs observed in affected cats, including hematuria, dysuria, stranguria, pollakiuria. Common types of FLUTD include idioopathic cystitis, urolithiasis, and urethral obstruction. UR Urinary™ St/Ox is formulated to provide complete and balanced nutrition and to meet the special dietary needs of cats that are predisposed to lower urinary tract conditions.

Indications

UR St/Ox is formulated for cats with the following conditions:
- Struvite-associated FLUTD
- Sterile struvite uroliths
- History of calcium oxalate uroliths
- Idiopathic cystitis

Helps increase urine volume to dilute the urine

- Increased water intake is recommended for cats with FLUTD
- Formulated to promote increased water intake
- The dietary sodium level in dry UR St/Ox is a safe, effective means of increasing urine volume
- Increased urine volume helps flush out stone forming materials
- UR St/Ox canned diet contains 77.27% moisture to facilitate water intake

Average urine pH = 6.2

- pH = 6.2 (pH range of 6.0-6.4)

High dietary protein

- Supports a healthy immune system
- Helps maintain lean body mass
- Increasing dietary protein correlates to increased urine volume

Moderate fat and calorie content

- Because obesity is a predisposing factor for FLUTD, it is important to maintain an ideal body condition in cats that are at risk
- UR St/Ox formulas contain moderate levels of fat and calories to help achieve an ideal body condition
UR St/Ox formulas help minimize the risk of both struvite and calcium oxalate stones

- Promotes production of urine undersaturated for struvite
  - New struvite crystals and stones should not form
  - Existing struvite crystals and stones should dissolve

- Promotes production of urine metastable for calcium oxalate
  - New calcium oxalate crystals & stones should not form
  - Existing calcium oxalate crystals & stones may grow and will not dissolve

RSS and APR are methods to assess the risk of stone formation

- Crystal and stone formation is influenced by various characteristics of the urine, including urine volume, urine pH, and the concentrations of mineral and other compounds.
- Some of these characteristics can be influenced by diet.
- To measure the effect of diet on the likelihood of stone formation, APR* and RSS* techniques are used.
- APR and RSS values fall into three risk categories
  - Undersaturated
  - Saturated
  - Oversaturated (see figure 2)

* APR (Activity Product Ratio) and RSS (Relative Super Saturation)

FIGURE 2. Relationship between crystal concentration and stone formation

Increasing Concentration of Crystals in Urine

OVERSATURATED (UNSTABLE)
New crystals & stones form
Existing crystals & stones grow

SATURATED (METASTABLE)
New crystals do not form,
Existing crystals and stones may grow

UNDERSATURATED (STABLE)
New crystals do not form,
Existing crystals & stones dissolve

FIGURE 3. RSS & APR for Struvite indicates that existing crystals or stones should dissolve.

RSS & APR for Struvite

<table>
<thead>
<tr>
<th>RSS Values</th>
<th>APR Values</th>
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</thead>
<tbody>
<tr>
<td>DRY</td>
<td>CANNED</td>
</tr>
<tr>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>0.5</td>
<td>0.79</td>
</tr>
<tr>
<td>0.108</td>
<td>0.05</td>
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</table>

RSS & APR for Calcium Oxalate

<table>
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<tr>
<th>RSS Values</th>
<th>Oversaturated</th>
<th>APR Values</th>
</tr>
</thead>
<tbody>
<tr>
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<td>DRY</td>
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</tr>
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</tr>
<tr>
<td>1</td>
<td>0.05</td>
<td></td>
</tr>
</tbody>
</table>

FIGURE 4. RSS & APR for Calcium Oxalate indicates that new crystals and stones should not form.
UR Urinary™ St/Ox brand Feline Formula

For more information, visit www.purinavets.com

(user name: purinavets: password: nutrition) or call 1-800-222-VETS (8387) weekdays, 8:00 a.m. to 4:30 p.m. CT.

UR Urinary™ St/Ox Brand Feline Formula from Nestlé Purina is available in dry and canned forms for adult cats of all ages.