

Collecting a urine sample from your cat at home

A guide for cat owners



Equipment needed

1. One clean, dry, empty litter tray
2. A supply of non-absorbent cat litter: cats do not usually like to urinate in an empty tray. Examples of non-absorbent litters include:
 - Commercial brands eg Katkor, Mikki, Catrine, Kit4Cat (available from your vet, pet store or online)
 - Clean aquarium gravel
 - A sheet of bubble wrap cut to fit the litter tray
 - Chopped up supermarket plastic bags
3. A syringe/pipette and a sterile urine collection pot (available from your vet)

Katkor urine collection kit



- Commercially available non-absorbent cat litter kits usually come with a pipette and collection pot included

Mikki litter in a litter tray



How to collect a urine sample: 1

- Add the non-absorbent litter to the empty litter tray
- Consider putting some newspaper under one end of the tray so that the tray is on a slight slope
 - That way your cat will not get wet paws after urinating in the tray
- Confine your cat in one room with the specially prepared litter tray
 - Depending on your cat's routines, it may be easiest to do this overnight
- Periodically check whether your cat has urinated (no need to get up in the night!)
 - Most elderly cats will pass a sample within a few hours
 - Very determined cats may wait for up to 24 hours

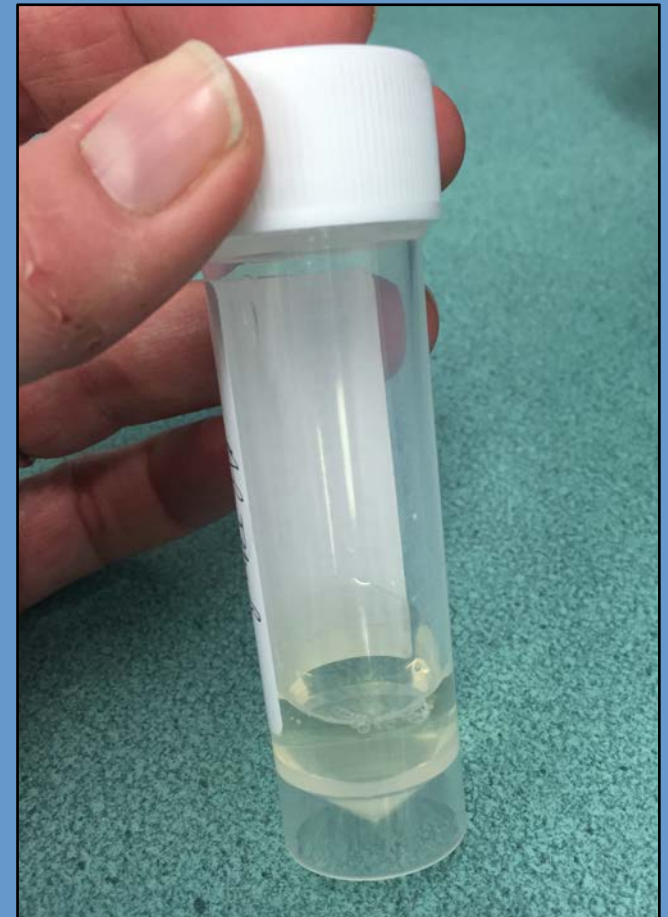
How to collect a urine sample: 2



- Once your cat has urinated, a sample can be collected
- Gently tip the litter tray so that the urine pools at one corner
- Collect a sample using a pipette or syringe
- Squirt the urine into the collection pot

How to collect a urine sample: 3

- 5-10 ml (1-2 teaspoons) of urine is ideal for analysis but if you have less than this, still collect it as it will probably be enough for some of the analysis: eg only a drop of urine is needed for a urine specific gravity
- If possible label the collection tube with your cat's name, your surname, the date and time of collection



This 'universal' tube can collect up to 20 ml urine

How to collect a urine sample: 4

- Deliver the sample to your vet clinic as soon as possible
- If immediate delivery is not possible then place the sample pot in a clean plastic bag or box which is then put into your refrigerator until you can take the sample in



Tricky cats

- What do I do if my cat won't urinate in the special litter tray?
 - If your cat does not pass a sample within 24 hours or if he/she becomes at all distressed you may need to abandon the procedure
 - Contact your vet for further advice if at all concerned
 - In most situations no problems are encountered and a sample can be quickly collected and delivered to your vet for analysis



Urine analysis: what do vets do?



Typical in-house analysis

1. Colour, clarity, visible abnormalities

- eg is the sample cloudy, bloody or otherwise abnormal?

2. Specific gravity test

- Measured using a refractometer
- Tells you how concentrated (or dilute) the urine is

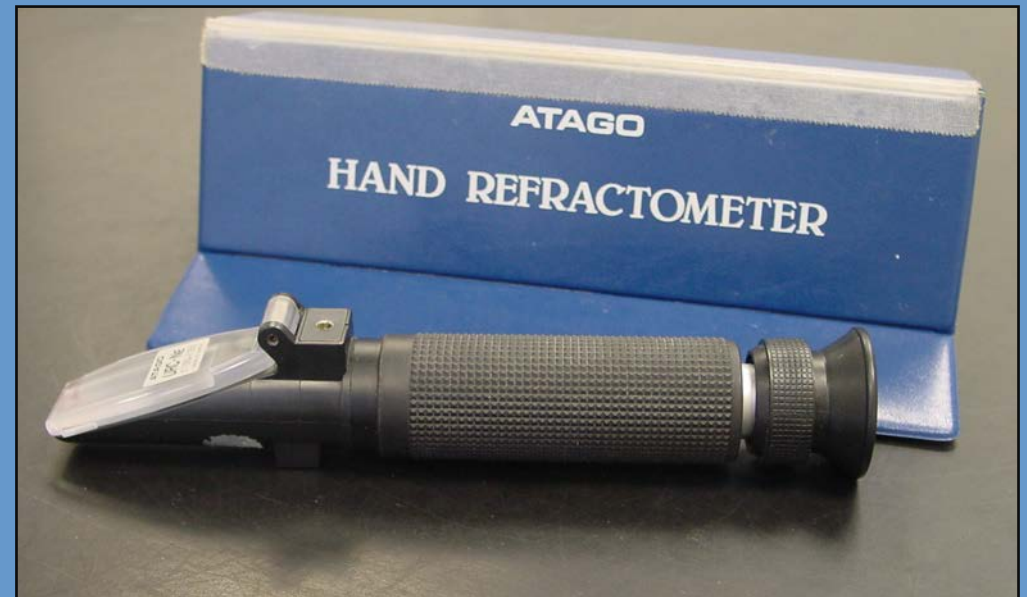
3. Dipstick

- Most helpful in checking for the presence of blood, glucose (sugar), ketones and protein
- Cats suffering from diabetes mellitus have glucose (+/- ketones) in their urine



Specific Gravity Interpretation

- Urine specific gravity (USG) should be measured using a refractometer and NOT dipsticks
- What's normal in healthy cats?
 - USG > 1.035
(usually 1.040 – 1.090)
 - NB In cats consuming a very liquid diet it can be normal for the USG to be lower than this



Specific Gravity Interpretation

- When is measurement of USG helpful– some examples:
 - Dehydration (otherwise healthy cat)
 - USG generally between 1.050 – 1.090
 - Cats with kidney disease, thyroid disease, diabetes mellitus
 - USG generally less than 1.035
 - Cats with idiopathic cystitis (idiopathic feline lower urinary tract disease)
 - USG generally above 1.040 and may be much higher

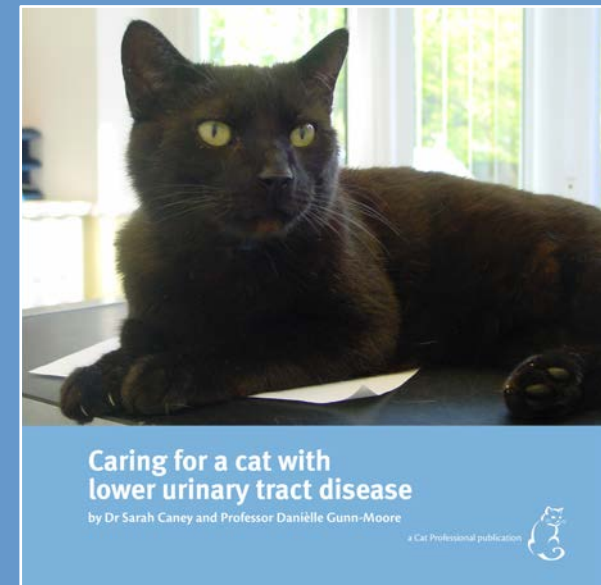
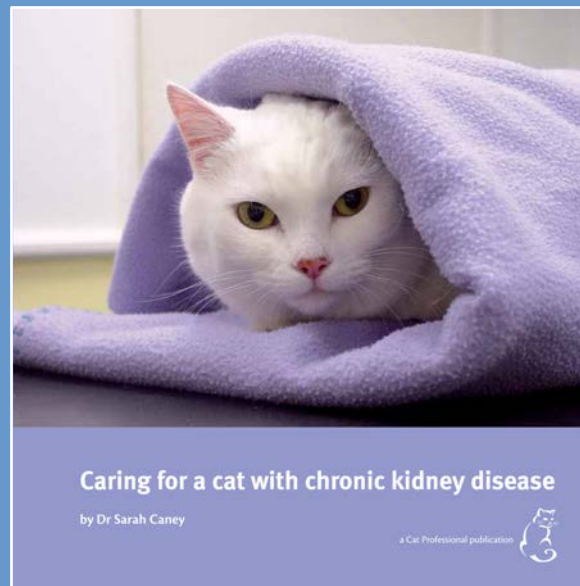
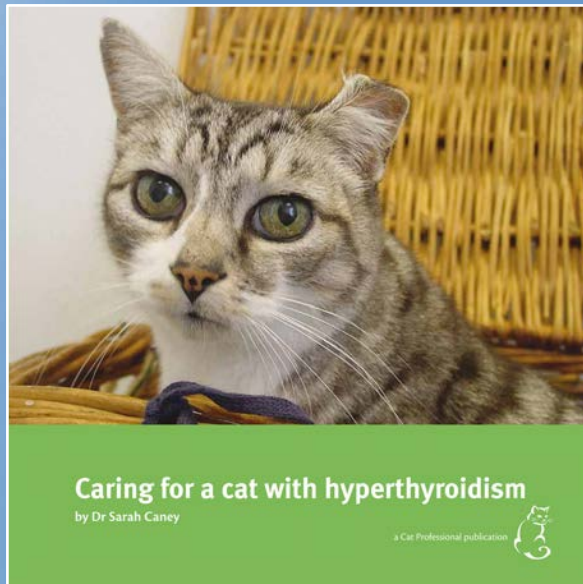


Other tests that may be done

- Sediment examination
 - Spin down (centrifuge) the urine sample and microscopically examine the solid material that collects at the bottom of the tube for evidence of infection, inflammation or other disease
- Bacterial culture (usually done at an external laboratory)
 - If suspicious of a bacterial urinary tract infection
- Protein measurement (usually done at an external laboratory)
 - Relevant in cats with kidney disease and some other conditions. The urine protein to creatinine (UPC) ratio is considered to be the best test for this

More information

- More information on the relevance of urine testing in cats with kidney disease, hyperthyroidism and lower urinary tract disease is available in our books on these topics
- <https://www.vetprofessionals.com/store/>



Disclaimer

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