

# Urinalysis: Dipstick



## Disclaimer

A series of booklets has been developed by the Clinical Skills Lab team (staff, recent graduates and students) from the School of Veterinary Sciences, University of Bristol, UK.

Please note:

- Each booklet illustrates one way to perform a skill and it is acknowledged that there are often other approaches. Before using the booklets students should check with their university or college whether the approach illustrated is acceptable in their context or whether an alternative method should be used.
- The booklets are made available in good faith and may be subject to changes.
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Equipment list:

Urinalysis: Dipstick

Equipment for this station:

- Urine dipsticks
- Urine (real or substitute)
- Syringe
- Paper towel or tissue
- Gloves

Considerations for this station:

- Wear gloves
- Anything contaminated with urine (tissue, paper towel, etc.) must be disposed of in clinical waste
- N.B. Substitute urine (rather than real urine) may be used in the Clinical Skills Lab
- Make sure you are familiar with 'CSL\_I02 Lab Area Rules' and wear a correctly fastened lab coat/scrub top, mop up any spills and spray work surface with 1% Virkon and wash hands in the hand wash sink.

Anyone working in the Clinical Skills Lab must read the 'CSL\_I01 Induction' and agree to abide by the 'CSL\_I00 House Rules' & 'CSL\_I02 Lab Area Rules'

Please inform a member of staff if equipment is damaged or about to run out.



1



Dipsticks commonly include tests for specific gravity, pH, glucose, protein, blood, bilirubin, ketones, urobilinogen, nitrite and leukocytes.

2



Despite the name “dipstick” it is better to draw up some urine from the sample pot into a sterile syringe.

3

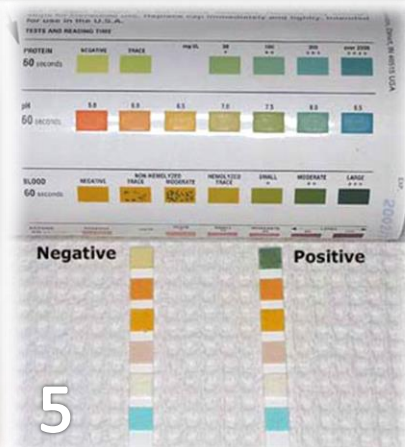


Keeping the dipstick flat, place a drop of urine on each reagent pad. Don't put more than a drop or it may run and mix. The reagents contain chemicals that can interfere with each other reducing test accuracy.

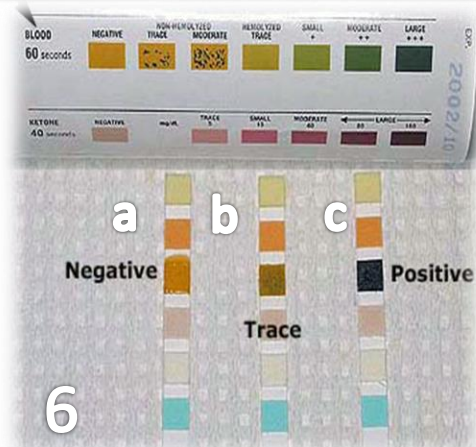
4



Compare the colour of each reagent with the standards on the pack. Each test should be read after the appropriate amount of time. The times will be indicated on the pack.



The right hand strip shows a positive result for the presence of protein in the urine.



These three test results indicate for blood/haemoglobin:  
a) Negative (normal)  
b) A trace is present  
c) A positive (a large amount is present in the urine)

Note: The dipstick reagents were designed for use with human urine. In animals specific gravity can be approximated but a refractometer is more accurate. Urobilinogen, nitrite and leukocyte tests are generally considered to be unreliable.



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# Resetting the station: Urinalysis: Dipstick

1. Dispose of used dipsticks (if real urine was used, the dipsticks must be placed into a clinical waste bin)
2. Securely close the urine pot
3. Leave syringes in the tray (if real urine was used dispose of used syringe/s in a clinical waste bin)
4. Wipe up any spills and leave the area clean and tidy
5. Anything contaminated with urine (e.g. tissue, paper towel, etc.) must also be disposed of in a clinical waste bin

*Station ready for the next person:*





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## I wish I'd known: Urinalysis: Dipstick

- Try to encourage owners to collect samples in clean containers (they could collect one from the practice) - as even washed jam jars will contain traces of sugar.