
Forensic Science: School Year 2021-2022

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Bell Ringer

- ✓ Can **DNA** be extracted from Urine?
- ✓ Does Urine actually smell? (In the body!)
- ✓ What **Forensic** tests might be performed that has clinical importance?



Don't Flush the Evidence



Introduction



A Lesson on Urinalysis

- ✓ Urine can contain important information that may be useful during a criminal trial.
- ✓ Analysis of urine samples can give results that provide inferences or clues, rather than direct evidence
- ✓ Once urine tests are conducted, the relevance of the data gathered from these tests must be evaluated.

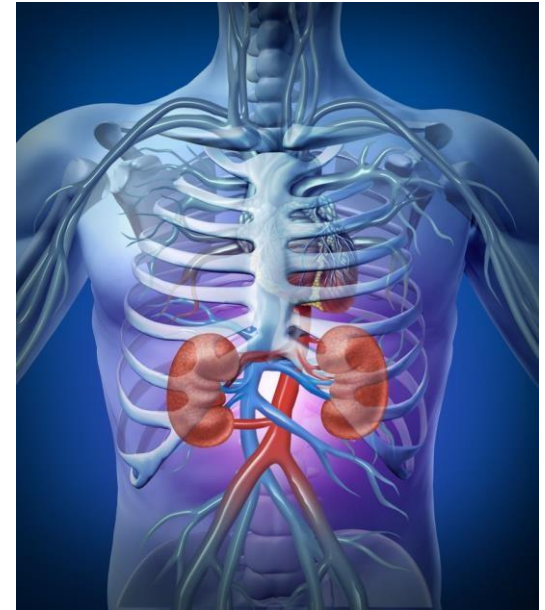
Main Ingredient = Water

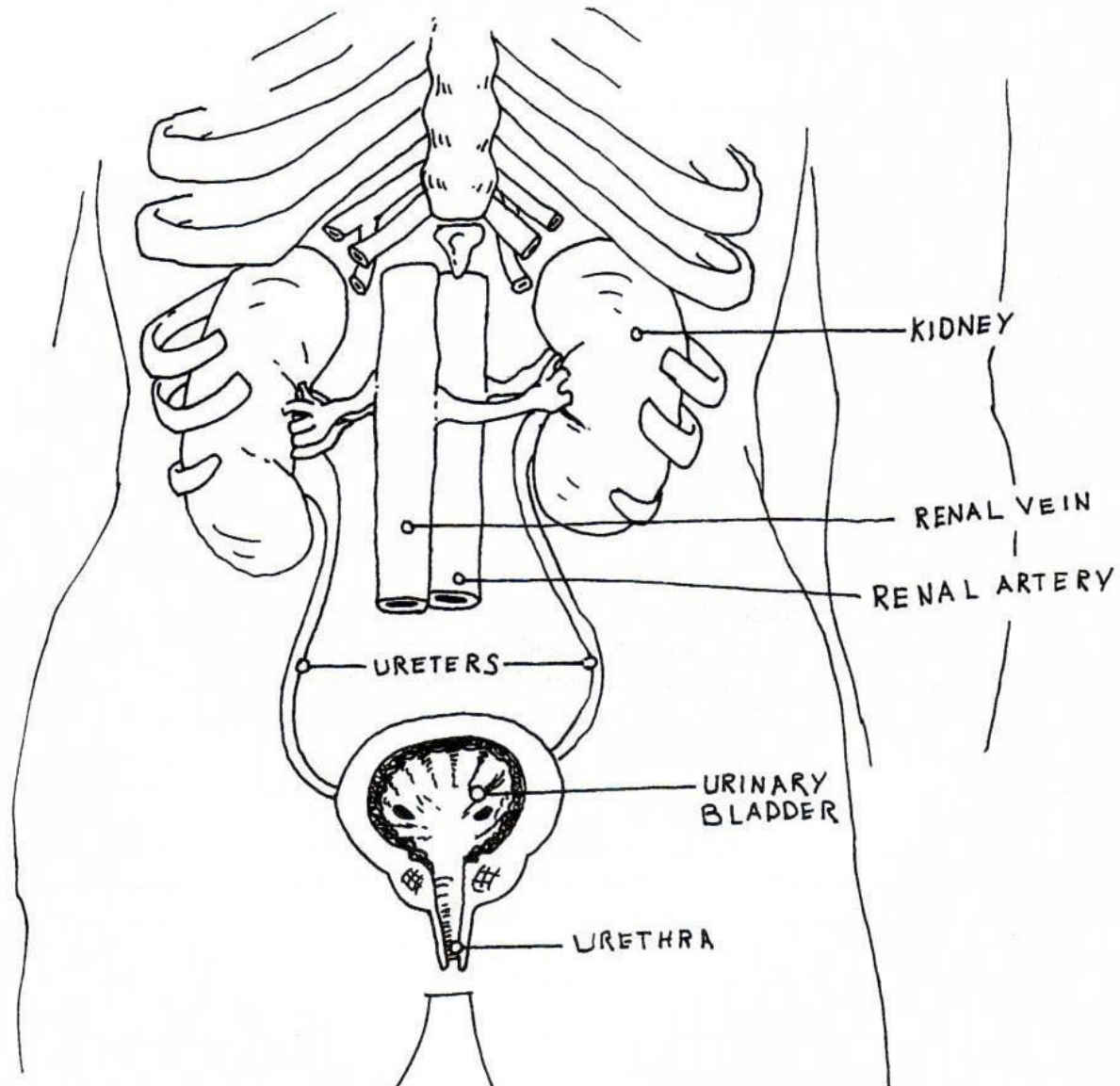


- ✓ The composition of urine varies, depending on diet and physical activity.
 - ✓ Urine is about 95% water, but it also contains **urea** and **uric acid**.
 - ✓ **Urea and uric acid** are waste products that result from the normal breakdown of substances in the body.
 - ✓ Sometimes trace amino acids can be found in urine, as well as a variety of electrolytes- compounds that ionize in water.
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A Liter or Two

- ✓ The volume of urine produced by one person varies from **0.6 to 2.5** liters per day, depending on such factors as fluid intake, body temperature, environmental temperature, and relative humidity.
- ✓ Urine flows from the kidneys, where it is formed, through the ureters to the **urinary bladder** and excreted through the urethra.





Sweet Urine

- ✓ In the case of **diabetes**, urine may contain glucose.
 - ✓ This is because the cells of diabetics cannot utilize all of the glucose in the **blood**.
 - ✓ Extra glucose accumulates in the **blood stream** and is removed by the **urinary system**.
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THANK YOU!

✓ **QUESTIONS OR
COMMENTS**
