



## Object 12: Frog



### What is it?

Frogs were used for pregnancy testing in the first half of the twentieth century. The frog pregnancy test was the first reliable and simple method that did not require the animal to be killed to reveal the result.

### History

Pregnancy tests have been around for thousands of years. The ancient Egyptians watered grain with a woman's urine. If the grain germinated the woman was thought to be pregnant. Physicians in the middle ages examined urine and claimed to be able to tell whether a woman was pregnant or not from its appearance. Neither of these methods sounds very reliable but there is no data about their accuracy.

The frog test was introduced by scientist Lancelot Hogben and was used until the 1950s. A frog was injected with a woman's urine. If she was not pregnant, nothing happened. If she was pregnant, the frog would lay eggs. This test could only be performed in clinical biochemistry laboratories so tanks of frogs had to be kept in the lab.

### Pathology

Modern pregnancy tests are based on detection of the chemical  $\beta$ -hCG, which is produced by the placenta (and is what caused the frog to lay eggs). Clinical Biochemists can now accurately measure the level of  $\beta$ -hCG in a blood or urine sample. Home kits are also widely available and accurate if used as instructed.

### Find out more

An unexpected side effect of importing frogs for pregnancy tests is reported by [BBC news](#). For information about modern pregnancy tests visit the [NHS Choices website](#).