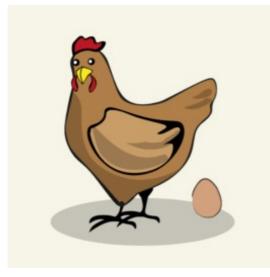
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A rooster needed for a hen to lay eggs! TRUE or FALSE?

FALSE

It is not necessary to have a rooster for a hen to lay eggs.

KEEP IN MIND

- \bigcirc The egg we consume is not fertilized by a rooster.
- Egg is produced by the hen's ovulation and is expelled by the cloaca.
- i Individual and environmental factors influence the egg laying.

In recent years in France, many households have adopted a hen and the hen is now the third most popular pet – after dogs and cats.

But do all these families own a rooster to have eggs?

The answer is no: no rooster is needed for the hen to lay eggs!

In fact, edible eggs are not fertilized by a male gamete, unlike fertilized eggs which, after incubation and hatching, give birth to chicks. The term "egg", which in biology means "an embryo composed of a single cell", is therefore misused for edible eggs. Edible eggs are in fact oocytes (the yolk) surrounded by a protective layer (the white).

Thus, the formation of an egg involves two female anatomical features: the ovary for the yolk and the oviduct for the white and the shell. In the adult hen, only the ovary and the left oviduct exist. This so-called "asymmetrical" reproductive tract produces the eggs that it lays.

Egg production begins with the formation of the yolk inside the ovary – where the ovary fills with lipid and protein droplets (vitellogenesis). The oocyte is then expelled from the ovary (ovulation) and begins to migrate into a tube called the oviduct. Then, at different levels of the oviduct, the membrane around the yolk thickens (vitelline membrane), the proteins of the white are secreted, the shell membranes are formed, the white is hydrated and the shell appears. It is only 24 to 26 hours after ovulation that the egg is ready to be laid in the cloaca. This is also referred to as oviposition. This is why the hen lays a maximum of one egg per day.

Egg laying is therefore an exclusively female activity that does not require the presence of a rooster. However, it is influenced by many individual or environmental factors that can affect its frequency and the color of the eggs.

