



**ECVET Units as Initial or Additional Training to the European Veterinary Assistant Diploma  
No. 2016-1-LV01-KA202-022652**

# Artificial Insemination

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## Reproductive organs



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# Reproductive organs

**not necessary for maintain individuals**

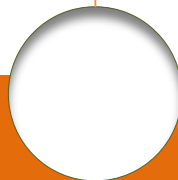
**BUT**

**necessary to maintain species**

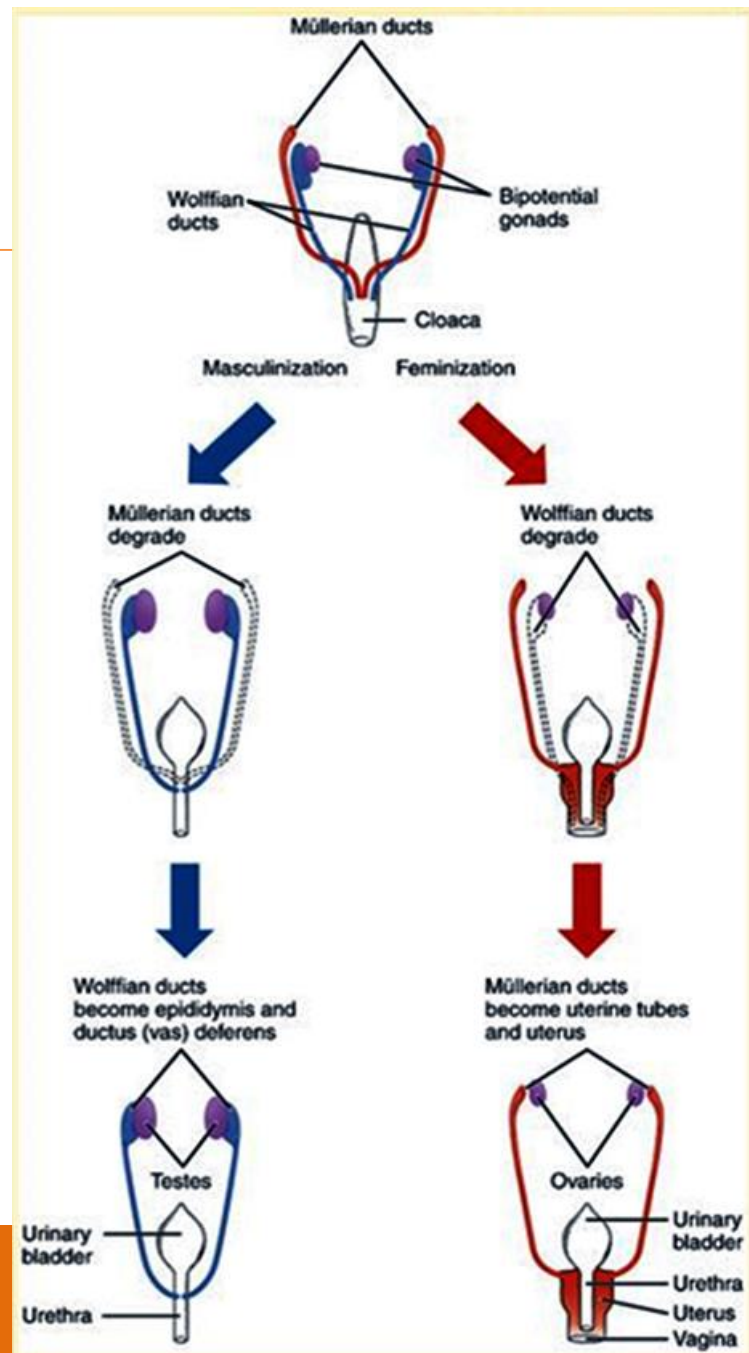
***reproduction is the main characteristics of living substances***

# Reproduction

- **Sexual – internal (multicellular) , external (fish, amphibians)**
- **Nonsexual – primitive one-cell organisms (bacterias, protozoas) – dividing cells**
- **Reptiles+birds – cloaka, fertilization inside,development outside**
- **Mammals – fertilization + development inside**



# Tubular tracts - development

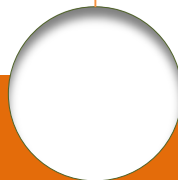


# Males

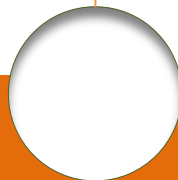
- **Scrotum – abdominal protrusion, skin pouch**
- **Testical descending**
  - Eq – just before delivery
  - Sus, Bo – in 5th month of pregnancy
  - Ca, Fe – after parturition, max. 7 months

# Cryptorchism

- **Testicles didn't descend to scrotum**
- **Hereditary**
- **Inguinal, abdominal, one side/ both sides**
- **Testical neoplasia, torsion, fertility disorders**

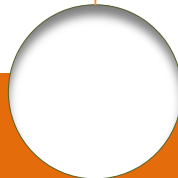


# Cryptorchism



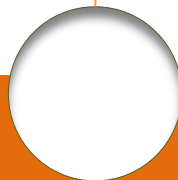
# Females

- **Mullerian ducts unite in different lengths in different species**

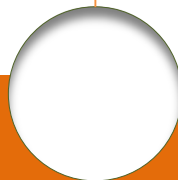




# Uterus bicornis – swine, bovine

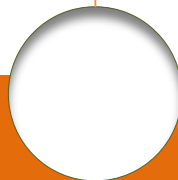


# Uterus simplex - human



# Exteral sexual system

	<b>SINUS UROGENITALIS</b>	<b>GENITAL BUMP</b>
<b>MALES</b>	----	penis
<b>FEMALES</b>	Vulva, vaginal entrance	clitoris

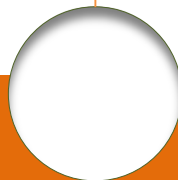


# Reproductive maturity

- **Development of reproductive organs is not finished just after parturition but in pubescence.**
  - Gamets – able to be fertilized (oocytes, spermias)
  - Hormones – creating sexual dimorfism (fetus – primar signs, adult – secundar signs)
  - CNS, other hormones – **SEXUAL INSTINCT**

# Reproductive maturity - influences

- **Species**
- **Sex**
- **Nutrition**
- **Wild / pet animal**
- **Wellfare**
- **! Mind also the body development!** (disorders in parturition, weak newborns, shorter fertility period, slower growth)



# Bibliography

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