

Master1 Production animale

Module
Anglais scientifique

Sheep are ruminant mammals that have a range of heights and weights, depending on their breed. Sheep, along with goats, are members of the subfamily **Caprinae** and the most common species of the genus **Ovis**. Domestic sheep are raised as livestock for a number of purposes, including wool, meat production and milk.

The word “**ewe**” refers only to female sheep. A **ram** is an uncastrated adult male sheep and a **wether** is a castrated male. A **lamb** is a baby sheep.

All subspecies of sheep share important anatomical characteristics.

- They are four-legged, hoofed animals.
- They have tails that hang down. Tails can be docked, or shortened, for health and sanitary reasons.
- They are ruminants, meaning they can regurgitate and re-chew indigestible foods for digestion in one of the four chambers in their stomach. Sheep are natural grazers.
- Females have udders and teats that provide milk.

1. The skeletal system

The skeletal system is one of the systems that make up any animal body. It is the framework on which the body is built and supports the weight of all the other systems. The skeletal system includes bones, muscles, the joints that connect bones, ligaments which allow movement in the joints and cartilage. Therefore, the skeletal system is also fundamental to the movement of the body.

The sheep skeletal system supports the animal’s body and weight and is the frame upon which the muscles and internal organs are connected. The skeleton is made up of the vertebral column, ribs and skull, limbs and joints. The vertebral column is made up of both fixed and movable bones. The ribs are long curved bones that form the ribcage, which protects essential organs. The skull includes all the bones of the head, including the lower jawbone, which forms a movable joint with other parts of the skull. Limbs include the forelegs as well as hindlegs. Forelegs include the shoulder and foreshank and the lower part of the limb includes the knee, fetlock and pastern. Hindlegs consist of the pelvis, thigh and a lower limb made up of the hock joint and cannon.

2. Digestive system

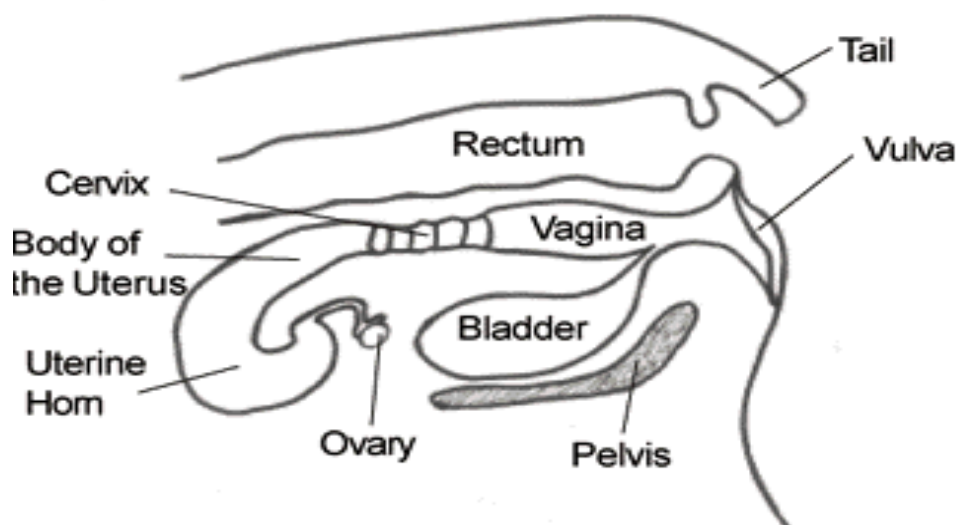
Food is broken down in the mouth by chewing; saliva is added as a lubricant.	Esophagus is a simple, muscular tube between the mouth and stomach.	In the stomach , including the ruminant forestomachs, enzymatic digestion of proteins is initiated and foodstuffs are reduced to liquid form.	The liver is the centre of metabolic activity in the body. Its major role in the digestive process is to provide bile salts to the small intestine, critical for digestion and absorption of fats.
The pancreas provides a mixture of digestive enzymes to the small intestine, critical for digestion of fats, carbohydrates and protein.	The small intestine is where the final stages of chemical enzymatic digestion occur and where almost all nutrients are absorbed.	The large intestine differs greatly among species in extent and importance—in all animals, water is absorbed, bacterial fermentation takes place and feces are formed.	<p style="text-align: center;">Reticulum</p> <p style="text-align: center;">Rumen</p> <p style="text-align: center;">Omasum</p> <p style="text-align: center;">Abomasum</p>
The reticulum lies against the diaphragm and is joined to the rumen by a fold of tissue.	The rumen is the largest of the forestomachs.	The reticulum is connected to the spherical omasum by a short tunnel.	The abomasum is the ruminant's true or glandular stomach, and is very similar to the mono-gastric stomach of animals such as the dog or cat.

3. Respiratory system

Nostrils are external openings to air passages.	Nostrils provide external openings for nasal cavities .	The pharynx is a passageway for air and food.	The larynx is the opening from the pharynx and is the organ of sound production in mammals.
The trachea provides the air passageway between the larynx and bronchi. It is a semi-flexible tube.	Bronchi are major air passages that are important for conducting air into the lungs.	The lungs are main structures of the respiratory system. They are located in the thorax. When the thorax expands, the lungs expand.	The pleura are membranes that surround both lungs.

4. Female Reproductive Organs

<p>The ovaries contain the ova, or eggs, and secrete female reproductive hormones, progesterone and estrogens.</p>	<p>The oviduct, also called fallopian tubes, transport sperm and ova, or egg, to the site of fertilization, which occurs in the upper one-third of the fallopian tube. The Fertilized ovum is then transported to the uterus.</p>	<p>The uterus consists of two separate uterine horns. In animals with multiple births, each horn can contain one or more fetuses. The uterus Provides a proper environment for embryo development, supports development of the fetus by supplying nutrients, removing waste, and protecting the fetus. It also transports the fetus out of the maternal body during birth.</p>
<p>The cervix is the gate way to the uterus and is a muscular canal consisting of several folds of tissue referred to as "rings." The cervix participates in sperm transport and, during pregnancy, blocks bacterial invasion.</p>	<p>The vagina is the exterior portion of the female reproductive tract and is the site of semen deposition during natural mating.</p>	<p>The vulva is a barrier that prevents external contamination of the female reproductive tract.</p>



5. Male Reproductive Organs

<p>The testes are paired organs which lie in the scrotum. They produce the male gametes, or spermatozoa, and secrete the male sex hormone, testosterone. Testosterone is essential for the development of male characteristics, maintaining normal sexual behavior and sperm production.</p>	<p>The scrotum is a muscular sac containing the testes. It supports and protects the testes and also plays a major role in temperature regulation.</p>	<p>The epididymis is located in the testes and is a long and convoluted tube in which sperm cells produced by the testicles are stored and mature to be capable of fertilization.</p>
<p>The vas deferens is the duct that rises from the tail of the epididymis into the abdomen, where it joins the urethra at the neck of the bladder. It is often referred to as the "spermatic cord."</p>	<p>Accessory glands secrete additional fluids which, when combined with the sperm and other secretions from the epididymis, form the semen.</p>	<p>The penis is the final part of the male reproductive tract and its function is to deposit semen into the vaginal tract of the female. At the end of the penis is an arrow tube called the urethral process that sprays the semen in and around the cervix of the cow. The preputial sheath protects the penis, except during mating.</p>